

SOUTHERN TEXTILE BULLETIN

VOL. II

CHARLOTTE, N. C., FEBRUARY 15, 1912

NUMBER 24

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of
Old Mills
a Specialty

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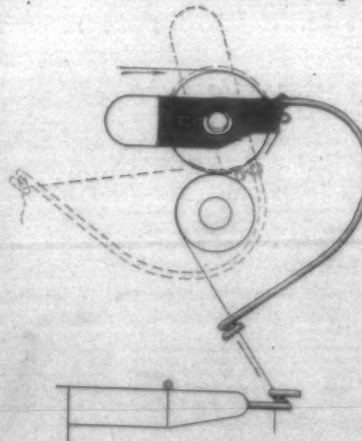
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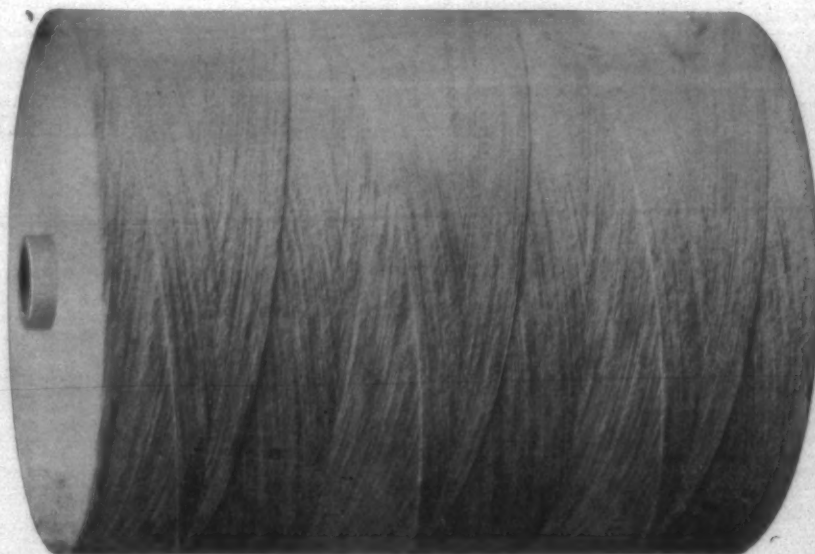
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SOUTHERN AGENT, O. A. ROBBINS, - - CHARLOTTE, N. C.

SOUTHERN TEXTILE BULLETIN

VOL. 2

CHARLOTTE, N. C., February 15, 1912

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Cotton Manufacturing in Portugal

Report of Commercial Agent R. M. Odell

PORTUGAL occupies a minor position among the cotton-manufacturing countries of the world. The total number of spindles (500,000) is not much in excess of the number in some one of the larger mills in England and Germany. Cotton manufacturing is, however, the leading industry of the country, and at the present time (May, 1911) is in a rather prosperous condition as contrasted with a world-wide depression in the textile trade. Three contributing causes have brought about this rather remarkable state of affairs: (1) The demand for cotton goods in the Portuguese colonies of Africa, a market controlled exclusively by the native mills, (2) the high prices obtained for rubber, cork, and wine, and (3) the high tariff on cotton goods.

Agricultural Industries.

Portugal contains 34,254 square miles (about the size of the state of Maine) and the population in 1900—the last official census—was about 5,000,000. The chief occupation is agriculture, the returns showing that more than 3,250,000 people are engaged in this branch, while slightly more than 1,000,000 are employed in various industries.

Of the total area of Portugal 2.2 per cent is under vineyards, 7.2 per cent under fruit trees, 12.5 per cent under cereals, 2.7 per cent under other crops, 29.6 per cent under forest and pasture, and 45.8 per cent is unproductive. The large area not under cultivation is due partly to the lack of capital and farmers and partly to the character of the country; yet it has been asserted that in the mountainous districts of the east there are from 2,000,000 to 4,000,000 hectares (hectare equals 2.47 acres) now untilled that are susceptible of cultivation. In the north peasant proprietorship prevails; the land is divided into small tracts and "petite culture" is practiced. In the south large properties and tenant farming are common. The chief cereal and animal products of the country are: In the north, maize and oxen; in the mountainous region, rye, sheep, and goats; in the central region, wheat and maize; and in the south, wheat, maize, and swine.

Throughout the country wine is produced in large quantities, the

lighter kinds being peculiar to the south, while the heavy wines are made in the north; large quantities of port wine are shipped to all parts of the world from Oporto. Portugal also possesses considerable mineral wealth, but, for lack of capital and on account of inadequate transportation facilities, valuable mines (copper, iron and cuprous iron pyrites) remain unworked.

The methods adopted in the cultivation of the land are almost primitive, the old Moorish plow still being in use on some of the farms. The people seem slow to adopt improved methods of cultivation and modern agricultural implements and machinery. The small farmers in the north are too poor to buy agricultural machines, but there is undoubtedly a market for them in the South. American manufacturers are not well represented and the bulk of the trade in this line is held by the English. If a progressive firm would undertake a campaign of enlightenment among the farmers, a policy that has been pursued in other markets of the world, there is every reason to believe that a good business might be done in agricultural implements and machinery.

Fish Packing—American Goods.

The preserving and packing of sardines forms an important industry in Portugal and large quantities of olive oil are imported for this purpose, chiefly from Spain and Italy. A drawback is allowed when this oil is reexported with the sardines, but the same privilege is not accorded to seed oil. Undoubtedly there would be a good market for American seed oils if they were allowed the same drawback.

In the city of Lisbon practically all the street railway cars are of American manufacture. To such an extent is this true that the term "American" is often used by the natives to designate the street car. American illuminating and lubricating oils, typewriters, sewing machines, and cash registers are being sold in increasing numbers, the trade in these lines being almost exclusively by the United States. American automobiles have not been introduced to a great extent, but there is a field for a moderately priced car, strongly built, and the few that have been sold in the

country have attracted notice and excited favorable comment.

Trend of Foreign Commerce.

Statistics of the commerce and industries of Portugal are difficult to obtain and are not considered accurate. The latest complete annual statistics compiled are for 1907. However, statistics of the trade passing through the ports of Lisbon and Oporto during the six months ending June 30, 1910, have recently been published, and they cover practically all the foreign trade excepting overland imports from and exports to Spain.

The foreign commerce of Portugal consists of exports valued at about \$30,000,000 and imports of about \$65,000,000 annually. Without a break, imports have considerably exceeded exports since 1865. Exports show only a limited gain, while imports have nearly doubled in the past 30 years.

The imports from Spain in 1909 amounted to \$8,729,568 and the exports thereto were \$8,687,879.

The foregoing figures include the imports entered for consumption and the exports of domestic products. The products of the Portuguese colonies pass through the port of Lisbon, owing to the reduced export duties levied on products shipped to Portugal. The re-exports of colonial produce amounted to \$14,000,000 in 1910, an increase of about 15 per cent over 1909.

Distribution of Foreign Trade.

The United States ranks third as a supplier of Portuguese needs and fifth as a buyer of Portuguese products, if Spain's overland trade with Portugal is not taken into consideration. Of the exports from the United States to Portugal during the period mentioned raw cotton was the leading article, amounting in value to \$2,750,000. The other articles were staves, lumber, oils, machinery and wheat. In addition to the exports to the United States included in the preceding table, produce from the colonies is reexported to America in large quantities, the principal articles under this head being cork, india rubber and cocoa. The value of these three articles imported into the United States from Portugal during the fiscal year 1910, according to American statistics, was \$1,888,739

\$1,469,733, and \$1,375,674, respectively. The imports from Portugal proper consisted of sulphur, ore, hides and skins, wine, wine lees, and sardines.

Principal Imports and Exports.

Considerable amount of goods in the Portuguese-American trade is transhipped at Liverpool and Bremen. This is particularly true in the case of raw cotton. It will be noted that the exports of wheat from the United States declined from \$1,248,408 in 1909 to \$8,649 in 1910. This is due to the fact that the importations of this article is absolutely prohibited in years when the domestic crop is good, while a fixed amount may be brought in when the crop in Portugal is poor.

Cotton-Goods Trade.

There was an increase in imports in 1910 over the corresponding period of 1909 in all classes except twine and sewing thread. The increased imports of cotton yarn were due to the more extended use of the finer numbers in manufacturing higher grades of cloth, several weaving mills having been established for this purpose in recent years. The increase in the imports of gray goods was due to a larger demand in the African colonies. To supply this market, which is practically monopolized by Portugal print, cloths are purchased abroad, bleached and printed in the domestic print works and reexported to the colonies.

United Kingdom Dominates Import Trade.

The predominance of the United Kingdom in the cotton-goods import trade is shown by the fact that during the first half of 1910 it supplied \$1,450,206 of the \$2,056,409 worth of cotton goods imported through Lisbon and Oporto. The amount supplied by other countries was as follows: Germany, \$360,971; France, \$130,629; Spain, \$9,874; Belgium, \$8,980; United States, \$3,431; all other countries, \$92,618.

The United Kingdom furnishes more than 90 per cent of the piece goods and 75 per cent of the finer grades of colored goods, zephyrs, shirtings, etc. In addition to the fact that Manchester manufacturers are able to produce a high quality of goods at a low cost there are

(Continued on Page 18)

Tariff Board Cotton Glossary

(Continued from Feb. 4)

Knit Goods.

The knitting industry is one of the main subdivisions of the great cotton manufacturing industry and includes all goods made from one or more continuous threads into a web by means of a series of interlocking loops or stitches. The knitting machine is the machine used in the process of knitting and may be either hand or power, circular or straight.

The art of knitting by hand is supposed to have originated in Scotland about the commencement of the sixteenth century. In 1589 William Lee, of Nottinghamshire, England, invented the knitting frame and laid the foundation of the knit-goods trade of today. In 1816 Marc Brunel invented a circular-knitting machine which produced a tubular web, and in 1831 power was applied to the knitting machine by Bailey. The modern factory development may be said to date from this last event, and its development and the increasing popularity of all kinds of knit goods since then has been wonderful. In the United States in 1850 there were 85 establishments for making knit goods, representing a total investment of \$554,734, with an output valued at \$1,028,102. In 1905 there were 1,079 establishments with a capital of \$663,531 and an output valued at \$136,558,139. At first knit goods were made almost entirely of wool, but the great bulk of the output today is of cotton.

Knit goods are usually divided into three classes:

(1) Hosiery, which includes all knitted coverings for the foot or leg, whether made seamless or full-fashioned with seams.

(2) Ribbed goods, which include tops for hose and for sleeves and legs of garments; also cardigan jackets, sweaters and underwear of certain types.

(3) Flat goods, which include ordinary underwear, either made full-fashioned or else in large pieces to be afterwards cut out and stitched together to form the garments.

(4) Hosiery.—Hose is a term applied to stockings, for women and children, which are knit the full length of the leg. Half hose are men's stockings, so called from their being only half the length of the leg.

There are two principal systems used in making hosiery, (a) the "seamless," which is made on a circular knitting machine, usually employing latch needles, and (b) the "full-fashioned," which is made on a straight knitting frame, usually employing spring-board needles. In the first case the stockings are knit with a thread traveling in a continuous circle, while in the latter case they are knitted out flat and afterwards seamed together, the first being the usual system in the United States and the latter in Germany. The term frame and machine is today simply a matter of choice, in either case. We will briefly describe the two systems and state

their advantages:

(a) The circular knitting machine to make seamless hosiery consists of a number of knitting needles arranged in slots in the circumference of a vertical cylinder a few inches in diameter. This is called the needle cylinder, and the diameter and the number of needles are designed according to the particular size and quality of stocking to be made. Around this needle cylinder is another cylinder, called the cam cylinder, because it carries on its inner side cams which act upon the needle bases, and alternately raise and lower them as it revolves. Either the needles or the cam cylinder can be arranged to rotate, but the needles are usually stationary in their circle, and the cam cylinder rotates around them. Yarn is fed to the needles from a jack bobbin by means of a yarn carrier attached to the cam cylinder, and as each needle is raised and lowered in succession, it catches and loops the yarn with the preceding loop, a continuous round-and-round course of stitches thus being formed until the tubular fabric for the leg has been completed and it is necessary to form the heel.

The heel and toe are in the form of a pouch or pocket, and they are knit by what is known as the narrowing and widening operation. For this operation the circle of needles is divided into three sections. One section, which we will distinguish as the a needles, extends half way round. The remaining half is divided into three equal parts, of which we will call the central part the c needles, and the sections on either side of this the b needles, these latter being specifically known as the fashioning needles. To form the heel, the a needles are lifted out of the way, the motion of the cam cylinder is changed from a round-and-round motion to a to-and-fro motion covering only half the circumference. At each end of the reciprocating movement one of the fashioning needles is thrown out of connection, first at one and then at the other, until all of the fashioning needles are out of action. When the narrowing operation is thus complete, the widening takes place by exactly the reverse operation, the fashioning needles being one by one alternately at each swing of the cam cylinder shifted back in place, and when all are in action again the reciprocating motion is again changed to the rotary and the full circle of needles operated to make the tubular part of the foot. To make the toe, the process of eliminating needles and then bringing them back into action again, using a reciprocating instead of a rotary motion the while, is employed as in the case of making the heel. In making the heel and sometimes the toe an extra thread is fed in and the two looped as one to make the reinforced sections until the motion changes back to the rotary when the extra thread is automatically cut out.

The circular machines have been

improved until most of them now make the stocking complete with the exception of the top of the toe, which must be completed with a short seam afterwards; but in making socks where a ribbed top is used this is first made on a rib machine and then this put on the circular machine and the balance of the sock stitched on to this top. In the full automatic knitters as now made by means of a pattern chain or wheel which measures the length of fabric knit and at predetermined points shifts the motion-changing and needle-cam devices to effect the desired results, the stocking can be shaped and narrowed automatically by the elimination of needles, and the heel and toes knit on without attention from the operative.

Fancy Hose.—Instead of forming the leg portion by rotary knitting, the cylinder can be reciprocated throughout, being supplied on opposite sides with yarn guides and knitting cams, so that each yarn, which may be of different colors, forms a course of stitches half way round the stocking and interloops with the other half of the course where they meet. Lace and embroidery can also be worked in the stockings on the circular machines, but owing to the arrangement of the parts, there can not be produced the variety obtainable on straight machines.

(b) Full-fashioned hosiery is made on the machine variously designated as the straight, flat bed, and rotary frame. The term "rotary" in this case was used to differentiate the type with rotary driving shafts from the old hand-knitting machine and is rather confusing, as it refers to straight and not to circular knitting.

In the "cotton" type of straight hosiery frames the stockings is knitted out flat and the fashioning, narrowing, and widening is done on the machine by transferring the loops from several of the edge needles in use to a separate instrument, moving them one or more needle spaces in or out and then replacing these loops on the needles. The needles in this machine are arranged in a straight line. When the "blank" has been completed it is cast off from the needle of the above machine, which is called a leg machine or legger, and is transferred to another machine called a foot maker or footer, which completes the foot, the web being narrowed by dropping stitches at the sides to form the instep and also at the toe, so it can be rounded properly. Some styles of full-fashioned hosiery require the transference of the web to three or more separate machines to knit the leg, heel pieces, foot and toe, respectively, so that the completed stocking may be accurately shaped.

Straight hosiery frames are built in 12 to 24 sections, each section being the space required for one stocking blank, but it is considered in Saxony that a 20-stock machine is the widest that a workman can manage efficiently, and on speciali-

ties this number is much reduced. The machines can be provided with attachments as desired, so as to make various effects, such as lace, double lace, splits, plating, stripes, embroidery, clockwork etc. Clock-el stockings are those having any figured ornamentation on the side of the ankle, either woven in the fabric or embroidered upon it.

The advantage of the full-fashioned over the seamless stocking is that it can be made to fit the leg so much better. Another advantage is that the fabric in the stocking, having been made with spring needles, which subject the yarn to little strain during weaving, has much greater elasticity than is attainable with the circular machine, where latch needles are used. In addition, a much wider range of ornamentation is possible with the straight machines than with the circular. Fine hosiery, that is, fine in the smallness of the mesh and of the yarn and in the perfection of the finished shape is knit almost exclusively upon flat-bed machines of the cotton type.

The advantage of the circular knitting machine is that the stocking is made complete, or practically so, on one machine and does not have to be transferred from one machine to another to be finished into shape, permitting of fewer and less skilled operatives. The finished stocking or sock shows no seam and can be made quicker and cheaper than the full-fashioned.

In a complete specification of a stocking it is necessary to give the gauge, weight, number of yarn, etc., for instance, a stocking might be described as a "39-gauge women's mercerized combed Egyptian *lisie*, made of 70-2 yarn, weighing 22 ounces," and these is also usually given the number of needles employed to make it. The number of needles is equal to the number of loops in the stocking; thus a 176-needle stocking means that there were 176 needles in the needle cylinder and therefore 176 loops in the circumference of the stocking. The term "gauge" varies at different places in this country and abroad. In most places in the United States as in England, the gauge means the number of leads, containing 2 needles each, contained in a space of 1 inch, a 27 gauge therefore meaning 18 needles to the inch, a 24 gauge meaning 16 needles to the inch, etc. In Chemnitz the usual system now is to define the gauge as the number of needles to the Saxon inch (Saxon inch equals 0.9294 English inch). Hosiery is judged by the fineness of the thread and the closeness of the texture. Single hosiery yarns usually range from 6s to 30s, and the two-ply yarns from 20s to 70s, though some is used up to 100s and in smaller amounts even up to 200s. A large amount of Egyptian cotton is employed in this trade, and when used unbleached, so that the characteristic brown shade of the cotton shows up in the fabric, the hosiery or underwear in which it is employed

(Continued on Page 8.)

The Future of the Motor Truck

IF you think of the modern motor truck as still in the experimental stage, or as simply a pleasure car adapted to commercial needs, you do it and your business a great injustice.

The motor truck is a product of the age—of the modern inventive genius and financial faith—a wage-earner like the rest of us, doomed as we all are to face the acid test of character and adaptability.

The motor truck is here because evolution has made us ready for it, because the twentieth century needs it.

If you think there are no sound economic reasons for its adaption just study these facts:

In ten years, the retail price of horses has increased on an average of 105 per cent.

In ten years the cost of hay, oats and straw has increased almost 150 per cent.

In ten years, real estate in our great cities, has increased at a phenomenal rate, making the taxes on ground devoted to stables in the heart of our cities almost prohibitive.

In ten years, the volume of street traffic in centres like New York and Chicago has increased 300 per cent, making relief from present congested conditions imperative.

In ten years, the motor truck has grown from an idea to not only a commercial success, but to a positive necessity.

In ten years, the cost of gasoline has been reduced almost 100 per cent.

In ten years the cost of electric current for electric vehicles has been reduced from an average of probably 12 cents to as low as 3 cents a kilowatt hour.

Here, then, are some economic reasons for the motor trucks. There are many others, but these are sufficient. They tell very plainly why it is here, and what is more important—why it has come to stay.

In considering any method of transportation there are three things to examine: The road, the load and the vehicle. In trackless transportation, the road must be accepted as it exists. In practically all work, the load must be accepted as it is received, and it must be delivered as ordered. These two factors of transportation are the same, no matter what method is employed. Hills, bad roads, frequent stops and starts, long routes or heavy loads are equal in the demand on animals or machines of any kind. The third factor, the vehicle, is the only one with which the solution of transportation problems can be made any easier.

Just as the electric street car has solved the problems for passenger transportation in cities so has the electrical-driven power wagon opened the way to a simple trucking and delivery system in practically all lines of trade.

The electric vehicle for trucking and delivery is purely a mechanical proposition. It is a machine. Like other machines, it can be built to do a given amount of work in a definite amount of time at a certain cost under any known conditions.

The safety carried load in pounds or tons is the basis of its mechanical design and construction. The specified speed with full load on hard level determines how much power will be required. The specified duration of continuous operation at full load on a hard level determines the amount of energy that must be stored in its battery at one time. The last condition fixes the size of the storage battery. The power and speed required determine the size of the motor and the gear ratios, while the total weight affects the tire design.

The cost of transportation by electric vehicles can be determined just as logically as the cost of operation of any other machine. It is merely a question on measuring the work and measuring the cost, and of placing one against the other.

Accurate engineering can be applied to the problems of transportation with greater satisfaction with electric vehicles than with any other type. Electrical measuring instruments reveal, and record if necessary, the condition and performance of storage batteries, and electric motors. The cost of producing electricity is a known quantity, the amount of electricity necessary to charge a battery is measurable. The amount of electricity delivered to an electric motor by the battery is a known quantity, or can be measured. The performance of an electric motor is accurately specified for any conditions. Its efficiency is easily determined.

To get the cost of operation of its electric vehicles down to the lowest figures, the leading manufacturer of this type has adopted methods that affect the design of the entire vehicle and result in an energy consumption per ton mile far below any previous figures.

The chief cause of this saving is the reduction in friction obtained by using ball or roller bearings in motor, countershaft and wheels, and efficient silent chain and roller chain drive between motor and wheels. Less energy is thus required, and a smaller and lighter battery may be used. The decrease in battery weight allows the framework to be lighter, reduces the dead weight, further reducing the energy consumption, the battery weight and the friction loss itself.

Another important improvement is the use of a single motor for driving the vehicle in place of two or four sometimes used in the past. The advantages lie in decreased weight, better motor efficiency, lighter battery, fewer parts, simpler control and a reduction in energy. Big business demand dividends—not sentiment. The old order of things must change if we are to make progress. Sometimes it hurts to give up methods to which we are long accustomed, but where it is a question of dollars and cents business men will eventually adopt the new.

The horse is slow, unsanitary, short-lived under city conditions and the opposite of economical when compared with the motor truck. The motor truck never gets sunstroke, it does not have to work alternate days only, it gets no broken legs from slippery pavements, it never gets sick or runs away, it takes up less room and it has 100 per cent greater working capacity than the best horse.

Yes, business demands the motor truck. It has tried out the power wagon and proved its value. The motor truck fleets of the country are multiplying at a surprising rate, fleets of 50 electrics being quite common. The gas truck with its greater radius of action has many adherents, and it looked for

a while as though it would dominate the field, but as about 80 per cent of all our trucking and deliveries is found in our cities, and the electric is essentially the more economical in short haul, frequent stop work, its friends have no fear for its survival. There is ample room for both types, so let the good work go on. Give us the motor truck, it means greater efficiency, cleaner streets, less disease and more business, all of which augment twentieth century success.—Wool & Cotton Reporter.

Report on Mills.

Raleigh, N. C.—The cotton, woolen and silk milling interests of North Carolina are treated in the chapter of the forthcoming annual report of Commissioner of Labor and Printing M. L. Shipman. It has just been made public and shows 306 mills, having \$52,792,752 capital; 3,332,811 spindles, 56,997 looms 550 braiders, 7,457 cards, operated with a total of 136,652 horse-power and using approximately 299,202,781 pounds of material. There are 54,057 employes of whom 30,535 are males. The number of persons dependent on the mills for support through the employes is estimated at 153,647. General improvement in the proficiency of the employes is reported by 75 per cent of the mills and nearly as great a per cent report improvement in the financial condition of the mill people and 21 per cent report no improvement in this respect by employes. Ninety-five per cent report the State labor laws complied with. The report estimates that 85 per cent of the mills and nearly as write. Male employes have high wage average of \$2.60 and low wage average 63 cents and females high average \$1.35 and low 56 cents. The average work hours is ten hours and forty-five minutes for day and at night ten hours and thirty minutes. Of the 306 mills, 295 report as to power uses, 108, steam power; 80 electricity; 42 waterpower; 26 combine steam and electricity; 3 steam, water and electricity; and 4 water and electricity.

A Saving of 50 per cent. Power IN THE OPERATION OF OUR Tape Drive Twisters

FOR COTTON YARNS SHOULD INTEREST YOU, MR. MILL MAN AND OUR TWISTERS PRODUCE A BETTER PRODUCT AND MORE OF IT.

RING TWISTERS—All lengths, and sizes of rings.

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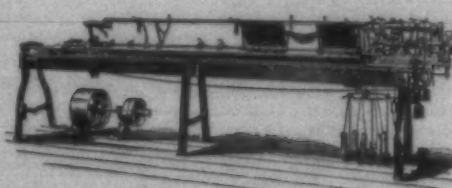
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Improved Inman Automatic BANDING MACHINE

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The only automatic machine in the world for making loop bands for spinning frames. Superior quality of bands without any cost of making. All bands exactly alike and no stretch of bands after they are put on. Saves child labor.

Also Beaming Machine to beam on to slasher beams.

Color Combinations

IN making combinations of colors for the production of fancy shades the dyer or color chemist has to take into account not only the color value of each addition but its properties as well. It is not meant by this that every combination must be made of dyes of equal fastness which exhaust at the same rate but nevertheless the dyer should be aware of these features so as to have control of any situation that may develop and be able to remedy any defect that may show itself. All are probably familiar with the way the old Logwood Black containing Fustic behaved as it faded, first becoming green then brown. This was because the fastness of the Fustic was so much greater than that of the Logwood. A garment fading equally does not look so badly because the lighter parts are in no greater contrast than the parts in high light and shadow, but when the fading causes a change in the actual tone of the color the effect is at once noticeable. It cannot be too strongly urged upon dyers to use for their fancy shades colors which will cause an equal fading—aim to have the fading, which must necessarily take place, simply a light slaty effect whenever possible. If your dyeing fades yellower it signifies that your blue or black is deficient and if a faster one is not practicable then use a yellow, brown or orange of less fastness and more nearly equal to the black. It is better to have the whole color less fast than to have it fade out of shade. Consider the effect on a carpet pattern, in which the colors are harmoniously balanced, which upon fading underwent a change in color and a resultant discord and yet there are today many dyeings put on the market where this defect is prominent. The result is only seen by the consumer who usually does not know where to place the blame, but there is caused a dissatisfaction that acts against future business. There are a number of dyestuffs which fade darker, if we may use such an expression, some which fade redder, some greener. By the use of a skillfully selected combination some shades can be made of fugitive dyes which compensate each other and which show little change on exposure and may be classed as fast. This same feature in connection with direct cotton dyes is interesting—the direct blacks are sensitive to acids and alkalis, acids turn them reddish and alkalis greenish. Brilliant yellow is orange when alkaline and lemon yellow when acid; Benzopurpiline is red when alkaline and blue black when acid. A combination of Direct Black, Brilliant Yellow and Benzopurpiline (all sensitive colors) can be made which gives a black that is unchanged in shade either by acid or alkali. Such a black is of interest probably only as an example of what may be done but serves to illustrate how the weak points of several dyes may be utilized for their mutual benefit.

The unequal exhausting power or slower dyeing of direct cotton dyes also give the dyer opportunity of producing results out of the ordinary. It is possible to dye a heavy cotton cloth with a full deep black on the surface and a mere tint inside by using for the surface color quickly exhausting dyes and a slower dye for the inside tint. This property sometimes acts against the dyer as when dyeing hosiery in tans the hard seams show yellow only and do not become penetrated by the browns. When a standing kettle is established for a fancy shade it would seem at first that it was necessary to have all the dyes of equal exhausting power in order to get a uniform shade, but this is not the case. If several lots have been dyed up to shade and the bath has become saturated with the relative proportions of each dye, the same additions made each time will give a uniform shade, just as if a single dyestuff were being used.

Combinations in the developed and after-treated cotton dyes are usually troublesome, but it is well to remember that there are yellows, blues and reds that will go through the process almost unchanged in shade and may therefore be used for shading. Thus if we have a developing blue and combine it with an unchangeable yellow we have what is practically a developing green.

There is another class of color combinations which might be mentioned, namely, those wasteful of color. This does not mean wasteful of dye although that is a matter of course. A combination of several dyes, brilliant in themselves, but which result in a dull subdued shade that could be made more cheaply, possibly faster, and better with a less elaborate combination of duller colors is wasteful of color. As a general rule the duller colors have better fastness and are cheaper than the brilliant ones although this rule has many exceptions.

Regarding the use of fast or fugitive colors, where cost is to be considered, and it generally is, it may be said that it is a good rule to use the fastest dyes obtainable for the delicate shades as the total cost of dye is not so great and the action of light is so much more noticeable on a pale shade but where a heavy body of color is wanted it may be found that what is called a fugitive dye stands very well in full shades.

The use of one unsuitable color in a combination is likely to spoil the whole, but how to know the unsuitable color is sometimes a problem. The only way to work intelligently in the matter is to have a full record of all the dyes you use with their properties to which you add from time to time any new ones you meet. The day is past when a dyer may work by rule of thumb, the art has become more exact and precise and to the man with the knowledge will come the power.—Textile Colorist.

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Loom Shuttle-Check

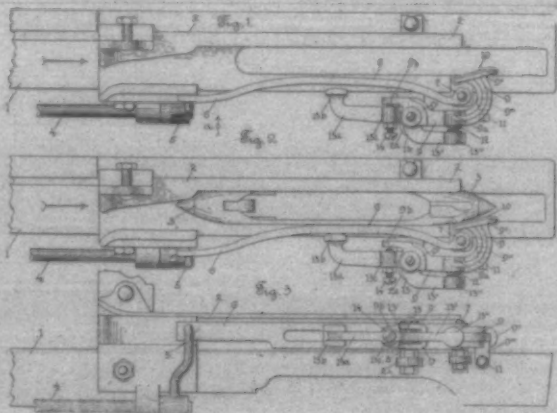
A recent invention by John B. Cloutier, of Saco, Maine, relates to a loom shuttle check, and the object of the invention is to provide a shuttle check of improved construction, and adapted to be combined with a stationary shuttle box of ordinary construction, with which the ordinary shuttle binder is used.

The shuttle check consists preferably of two levers or arms pivotally mounted on a common stud, independent of the binder pivotal stud, and adjustable relative to each other, and located at the front of the shuttle box, and near the outer end thereof. One of the two levers has an engaging end extending in the path of the shuttle when it enters the shuttle box, and the other of said levers has an engaging end adapted to engage the shuttle binder, to yieldingly press the binder against the shuttle when it is in the box. There is an actuating spring intermediate the first mentioned lever, and in this instance an extension on the second mentioned lever, beyond the pivot point of said lever. The first mentioned

end of the shuttle binder 6, which is pivoted at its outer end on a stud 7 on the front side of the shuttle box.

All of the above mentioned parts may be of the usual and well-known construction. The front side of the stationary shuttle box is provided in this instance with a lug or projection 2a, which has adjustably secured thereon a bolt 8. The bolt 8 has pivotally mounted thereon the yoke-shaped boss or hub 9, see Fig. 3, of an arm or lever 9, which extends towards the outer end of the shuttle box. The free end of the arm or lever is bent inwardly, and extends in this instance around the pivot stud 7 of the shuttle binder 6, and is adapted to engage with its engaging end 9," which end is preferably covered with leather 10 or other suitable material, the outer end of the shuttle 3, as shown in Fig. 2, when the shuttle enters the shuttle box.

In a downwardly extending lug 9" on the arm 9 is an adjusting screw 11, which turns in a threaded hole in said lug, and engages at its inner end the lower part of the



lever has an extension thereon beyond its pivot point, which is adapted to engage with an adjusting screw carried on the second mentioned lever, and the first mentioned lever has an adjusting screw thereon, to regulate the inward movement of said lever, all as will be hereinafter described.

The drawing shows a stationary shuttle box at one end of the loom, with the improvements in shuttle check applied thereto.

Referring to the drawing:—Figure 1 is a plan view of the right hand end of a lay of a loom, with a stationary shuttle box thereon, with said improvements applied thereto; there is no shuttle in the shuttle box. Fig 2 corresponds to Fig. 1, but shows the parts shown in Fig. 1, when a shuttle enters the shuttle box; a shuttle is shown in this figure, and, Fig 3 is a front view of the parts shown in Fig. 1, looking in the direction of arrow a, same figure.

In the accompanying drawing, 1 is the right hand end of a lay of a loom, carrying a stationary shuttle box or cell 2, for a shuttle 3, in the usual way.

Four is a rock shaft at the front of the lay, carrying the protector finger 5, which is adapted to bear at its upper end against the inner

stationary shuttle box 2, and acts to limit the inward movement of the lever 9. The lever 9 is provided with a boss 9 a thereon, see Fig. 1, adapted to hold in a recessed portion a helically coiled expansion spring 12.

The second lever or arm 13 of the shuttle check has its hub 23 pivotally mounted on the bolt 8. Extending outwardly from the hub 13' is the extension 13" having a boss 13" thereon, into which the expansion spring 12 enters. The other extension 13a, or main part of the lever 13, has the engaging end 13b, adapted to engage with the binder 6, when the engaging end 9" of the lever 9 is moved outwardly when the shuttle enters the shuttle box, in the direction indicated by the arrow in Fig. 1. On the main part 13a of the lever 13 is a boss 13c, which carries an adjusting screw 14, which is adapted to engage at its inner end with an extension 9b on the lever 9, on the opposite side of the pivot point from the main portion of the lever 9.

The operation of these improvements in shuttle checks, from the above description in connection with the drawing, will be readily understood by those skilled in the art.

(Continued on Page 18)

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Co-operation in Commercial Development

THE question of securing closer relations than have hitherto existed between the representative commercial and industrial organizations of the United States and those branches of the Federal government engaged in fostering and promoting the manufacturing and trade interests of the country is now attracting the attention of many alert business men. They have become convinced of the need of such close relations, if the United States is to compete with its foreign trade rivals in world markets on anything like even terms.

In Germany, as is well known, there is an uninterrupted chain of official relation between the Imperial Government and practically every German chamber of commerce, and every manufacturer and exporter and the established system of concerted national effort for the promotion of the commercial and industrial welfare of the country includes every factor which it is believed can contribute to that result. All the resources of the empire, its railroads, its banks and its steamship lines are drawn upon to help the cause. Industrial and commercial education is also made an important part of the system.

As a result of this national teamwork the manufactures and the foreign trade of Germany have increased enormously, and that country has already secured a very strongly entrenched position in foreign markets. The German trader, in whatever corner of the world he is in business, is never quite out of touch with the governmental agencies for his aid. He finds German banks, German transportation lines and German capital all ready to aid him, and his home government alert to help with special railroad rates, expert advice and other means to facilitate his operations.

There are now in existence in remedy any defect that in yamayow the United States several hundred strong and active organizations, chambers of commerce, boards of trade and manufacturers' associations. These various bodies are the potent factors in local affairs, and in their respective fields in the promotion of domestic trade, but there is little national co-operation

between them and there has been little realization amongst their members of the trend of the commerce of the world.

Busy providing for an enormous domestic market, few American manufacturers have devoted attention to export trade, and comparatively few, also, have noted the efforts of the Federal government in this and other fields. Conditions are changing rapidly, however, and many are now making individual efforts to capture foreign markets for their products—and making these efforts without the knowledge which would prevent costly mistakes.

The Department of Agriculture has shown the way to transform its expenditures for investigation, experiment and publicity into millions of increased production and value on the farm. Much of the success of that work is due to the intimate relations which exist between that Department and the agricultural associations, experiment stations, farmers' unions, granges, etc. The Department of Commerce and Labor, established in 1903, has entered a similar field with its various bureaus, and similar co-operation must be established between the latter Department and the commercial and industrial interests of the country before its efforts can have their full successful effect.

A new commercial organization is now proposed, and this proposal has the hearty endorsement of the Department of Commerce and Labor. Of such a representative body is founded on broad and democratic lines, it will be possible to secure with its aid ten-fold greater results from the investigations and discoveries of the government agents.

Publicity is essential to the success of the Federal activities for the promotion of commerce and manufactures. Much excellent service has already been accomplished and the records of the results of this service have been made public but to too small and too indifferent an audience. If manufacturers and commercial interests were even generally conversant with the details of the work of the Bureau of Standards, for example, or the Bureau of Manufactures, and similar bureaus in the Department of

Commerce and Labor, or aware of the object of their labors, and of the fruitful fields of investigation still untouched and awaiting development, the whole country would be much the gainer.

One very important result of the establishment of a representative national organization would be to secure through it, almost at once, this large audience for the messages which the government agents have to deliver in regard to trade conditions in the world as reported by consuls, and by commercial agents of the Bureau of Manufactures, the reports in regard to the discoveries of the Bureau of Standards in its great field of experiment and research, or the Bureau of Labor in its work in the interests of that Branch of society.

Most local commercial bodies have some journal or other method of giving publicity to pertinent matters of importance to the local interests, and through a national organization the line of communication to the Department would always be open. The relations between the Department and such a national body would moreover be mutually helpful as the Department of Commerce and Labor would then be advised of new avenues for the class of service which can best be accomplished through government agencies. The time seems to be ripe for carrying out the plan in question.

The best systems for the development of commerce and manufacture should be at our service in the world-battle for trade as the best ships should be in our navy. We should maintain a state of preparedness for commercial struggles, just as it is our policy to maintain preparedness in military fields and the formation of a national organization would be a long step forward.

It is said that trade follows the flag, the loan, or this or that, but it may be stated more certainly that trade follows effort more than anything else, and especially concerted effort.—A. M. Baldwin in Silk.

Cotton Glossary.

(Continued from Page 4)

ed is known as balbriggan. The finer grades are largely made with "lisle thread," which is a yarn made from long-stapled cotton, hard twisted, and then gassed by being passed through a flame to remove the loose, adhering fibers. There is an increasing use of mercerized yarns.

(2 and 3) What are commonly called flat goods are knit on circular spring-needle machines. The rib-knitting machine is built on an entirely different plan from the circular, in that it has two sets of needles working in conjunction, usually at right angles, and producing ribs or wales on both sides of the fabric. As the wales are formed alternately on either side by one set of needles forming the face and the other the back, the motions of the rib machine are intermittent and the production is less than with the circular machine. Cuffs, anklets, hosiery tops, etc., as well as sweaters and other goods for outer wear, are made on the rib machine, but it is not ordinarily used for garments to be worn next the skin, as a smooth surface is preferred in such case.

Underwear can be made in various ways. Full-fashioned underwear is made on a straight spring-needle machine provided with means for narrowing or shaping the garment to fit the body and limbs. Only the finest grades are made in this way, as the machinery is more costly, the speed slower the production less, and higher-skilled mechanics and operate than is the case with the ordinary tubular cloth machine.

Goods Advancing.

Bag manufacturers have purchased a large yardage of cotton goods, and are today paying 3 1-2 cents for 6-yard sheetings. A short time ago these same manufacturers would not touch these goods at 3 1-2 cents.

National Association of Hosiery and Underwear Manufacturers.

The annual convention and exhibition of the National Association of Hosiery and Underwear Manufacturers will be held on May 6-10, in the First Regiment Armory at Broad and Calhoun streets, Philadelphia.

W. H. BIGELOW

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DISCUSSIONS BY PRACTICAL MEN

Letters From Prize Winners.

Yazoo City, Miss., Feb. 7, 1912.
Southern Textile Bulletin,
Charlotte, N. C.

Editor:

Your letter of recent date received, also check for my share of second prize in the contest on Management of Help. Please accept my thanks and pardon my delay in answering.

The advertisement which I recently carried in the Bulletin has brought a great many applications and I think that in a few days I will have all the help that I need, for which I thank the Bulletin.

I think that the Southern Textile Bulletin is doing a great work and should be appreciated by the cotton mill people in general, especially those in the South.

I will sometime in the near future write something for the benefit of the Bulletin and its many readers.

With best wishes, I am,
Yours very truly,
C. H. Goodroe.

Opening Cotton.

Editor:

I noticed the article by J. E. C. in your last issue and wish to say that I hope more will be printed about methods of opening and mixing cotton for I believe the great defect of the Southern cotton mills is in opening cotton.

If you send the cotton through the lappers in hard batches of compressed cotton the eveners can do nothing with it and even on the cards the laps will be heavy in spots which causes uneven sliver and uneven yarn. On the other hand if the cotton goes into the hopper of the feeder in a loose fluffy condition with no hard lumps there will be nothing to cause the eveners to jump or slip and unless the machines are out of fix the stock will go through in an even condition.

If you want good running work start your cotton through in an even condition and you will get results.

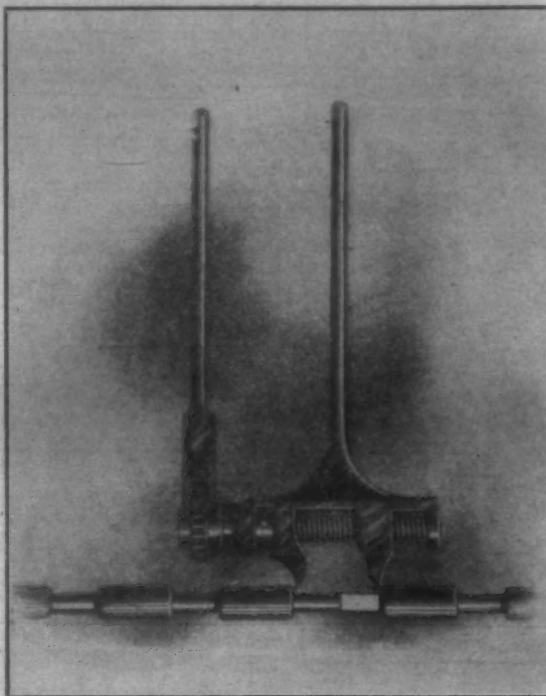
The English mills rarely use double roving for numbers less than 40s because they pay a great deal of attention to opening and mixing and do not have to do the evening on the spinning frames.

A. R. L.

About Sizing.

Somehow, you American mill men have been mistreating a most useful art.

Sizing is more important than to give it only slight thought. A mere slap-dash-bang method will never accomplish results. You take an inexperienced man, often a boy, hand him a formula and tell him to go ahead. Then, as long as the result passes—good. Only it must not



Roll Spreader

Those who have had much experience in overhauling and repairing spinning frames will appreciate the advantages of the above roll spreader which was recently shown at a textile machinery exhibit in England.

cost above a certain allowance.

You sit down and give hours of thought to your weaving and spinning. And you give just an irritated moment to the process that should make up for defects in spinning and increase production and effect in weaving.—Extract from circular by New Brunswick Chemical Co.

Another Cotton Fire.

An unusual case of successful operation of automatic sprinklers occurred in connection with a recent fire in the inclined trunk of an opening room of the Pee Dee Mfg. Co. The gravity tank for water supply was empty at the time the fire started, as it was being painted on the inside. The pipes of the system however, contained water and the automatic action started the fire pump. Eleven Grinnell sprinkler heads opened and, in spite of the handicap due to the lack of water in the gravity tank, the fire was quickly extinguished.

Card Settings.

Editor.

I want to ask a questions on your discussion page and hope some good carders will answer me.

We have been running local Carolina cotton of about 7-8 inch staple but will probably change to full 1 1-8 cotton.

What changes in card settings or adjustments would a good carder make for such a change of staple?

Should a different feed plate be

used? I have heard that the card builders design the feed plate in accordance with the staple and in that case I should think new feed plates would be desirable for the longer staple which we will use.

We are doing good carding now and as I do not wish to take any chances of getting in a hole when we change to longer staple, I am asking advice.

Young Carder.

Swat the Fly.

The management of the Parker Cotton Mills Company has made arrangements with Dr. E. H. T. Foster, a sanitary inspector and health enthusiast, to visit all mills controlled by the Parker Cotton Mills Company, and give illustrated lectures on the fly. Realizing the danger of the fly a campaign will be started in Monaghan Mills against him.

The "swat the fly movement" will likely not be inaugurated at Monaghan until Dr. Foster has delivered his address, when the residents will have the opportunity of learning of the best methods to get rid of the fly. Dr. Foster has made a study of the fly and is thoroughly up on the subject.

"Why does a dog hang his tongue out of his mouth?" asked the inspector.

"Yes, my boy?" he said to a bright looking lad, who held up his hand, while the light of genius was in his eye.

"To balance his tail!" shouted the bright boy.—Exchange.

Superintendents and Overseers

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Rocky Mount, N. C.

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T. M. Moore Carder
W. A. Skidmore Spinner
R. J. Allsbrook Asst. Supt.
J. S. Biggs Master Mechanic

Dwight Mfg. Co.

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J. D. Loner Spinner
P. B. Ware Weaver
R. H. Chadwick Cloth Room
H. J. Burnap Master Mechanic

American Net & Twine Co.

Anniston, Ala.

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L. E. Ogletree Superintendent
U. S. Henderson Carder
D. H. Hazel Spinner
M. S. Allen Twister
A. S. Smith Finisher
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Pell City Mfg. Co.

Pell City, Ala.

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W. R. Thigpen Cloth Room
T. Mungall Dyer
L. R. Thornburg Slashing
B. W. Locke Master Mechanic

Avondale Mills.

Birmingham, Ala.

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L. J. Cochran Carder
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G. R. Matthews Weaver
E. C. Barfield Cloth Room
Wiley Boland Dyer
G. A. Simcock Master Mechanic

Roanoke Mills Co.

Roanoke Rapids, N. C.

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T. E. Ratcliffe, S. J. Davis Spins.
R. L. Martin, Chas. Welch Wvrs.
W. B. D. Loach Cloth Room
Louis Grimm Dyer
J. B. O'Brien Beamer
T. J. St. Sing Master Mechanic
Robt. Webster Finisher

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THURSDAY, February 15

Geo. A. Gray.

Size of English Cotton Mills.

With the death of Geo. A. Gray of Gastonia, N. C., which occurred last Thursday, the textile industry of the South lost one of its ablest and most successful men.

Beginning his mill career as a doffer boy, Geo. Gray worked his way to the top of the ladder and was at the time of his death president of one mill and a large stockholder in several others.

His advice on cotton mill matters was probably more generally sought than that of any other cotton manufacturer and bankers and business men had supreme confidence in his judgment and ability.

He occupied a peculiar position in the textile industry of this section and will be very greatly missed.

His life will serve as an inspiration to many as it shows how a man may rise in the cotton manufacturing business by industry and close application to business.

We extend to his family our sincere sympathy and are glad of the opportunity of saying a word of appreciation of Geo. A. Gray, both as a man and as a manufacturer.

The English cotton industry is noted for its big mills. It is a fact not generally realized, however, that while they have a large number of great spinning mills there are comparatively few large weaving mills. For instance, there are 24 American companies that in addition to spindles, have over 4,000 looms each, there are only two companies in England with more than 4,000 looms. Taking the figures as published in reliable directories we find that the number of large mills compare as follows:

	United England	States.
50,000 to 100,000 spindles	275	105
100,000 to 150,000 spindles	110	46
150,000 to 200,000 spindles	26	3
Over 200,000 spindles	21	19
1,000 to 2,000 looms	177	95
2,000 to 3,000 looms	27	42
3,000 to 4,000 looms	4	23
Over 4,000 looms	2	21

This table shows that while the English have more large mills than the Americans, yet that of the very large mills of over 200,000 spindles

there are 19 in the United States as compared with 21 in England. Of weaving mills under 2,000 looms the English have over twice as many but of weaving mills above 2,000 the Americans have over twice as many. In this statement spinning and weaving have been considered as separate concerns. The English have one gigantic spinning combination of 3,000,000 spindles but this concern owns no looms and there is not a combined spinning and weaving company in all England that can compare with the Amoskeag, the Fall River Iron Works, or the B. B. & R. Knights Company. Their two biggest companies in this line are Horrockses, Crewdson & Co., Ltd., with 250,000 spindles and 9,530 looms and Geo. & R. Dewhurst, Ltd., with 224,802 spindles and 4,483 looms but neither of these has the combined spinning and weaving capacity of the new Parker Cotton Mills Co., which ranks fourth among American cotton mill companies.

The only English companies having 200,000 spindles are the following:

	Headquarters	Spindles	Looms
The Fine Cot. Sp. & Doub. As., Ltd.	Manchester..	3,000,000	
Crosses & Winkworth, Ltd.	Bolton.....	364,000	
Irwell Bank Spinning Co., Ltd.	Stoneclough..	335,752	
Howe Bridge Cotton Sp. Co., Ltd.	Atherton.....	316,000	
Bolton Union Spinning Co., Ltd.	Bolton.....	293,410	
Times Mill Co., Ltd.	Middleton.....	264,144	
Broadstone Spinning Co., Ltd.	Reddish.....	262,504	
Bee Hive Spinning Co., Ltd.	Great Lever....	262,000	
Wm. Heaton & Sons.....	Lostock.....	160,000	
Horrockses, Crewdson & Co., Ltd.	Preston.....	250,000	9,530
Bolton Textile Mill Co., Ltd.	Farnworth.....	250,000	
South End Spinning Co., Ltd.	Mossley.....	250,000	
Eckerleys Limited	Wigan.....	245,000	1,750
Barlow & Jones, Ltd.	Bolton.....	227,000	1,300
Mather Lane Spinning Co., Ltd.	Leigh.....	227,000	
Geo. & R. Dewhurst, Ltd.	Preston.....	224,802	4,483
J. & Hayes, Ltd.	Leigh.....	218,496	
Atherton Cotton Spinning Co., Ltd.	Atherton.....	210,000	
Swan Lane Spinning Co., Ltd.	Bolton.....	210,000	
Tunncliffe & Hampson, Ltd.	Leigh.....	203,798	
John Wood & Brothers, Ltd.	Glossop.....	200,000	3,200

The F. C. S. & D. Association (Fine Cotton Spinners' and Doublers' Association, Ltd.) is not really an association, as this term is ordinarily used, but is an amalgamation in which the separate mills are but departments of one company. Included in this Association are five mills that otherwise would be entitled to be listed above.

Horrockses, Crewdson & Co., Ltd., are the foremost manufacturers of long cloth and calicoes in England and have a capital of £757,100, or \$3,685,000. They employ some 6,000 operatives in their plants at Preston and Bolton (the centers respectively of the plain and fancy trade in England,) and have warehouses at Manchester, London and Glasgow, where they supply the trade direct.

The two concerns above are the only big amalgamations in the regu-

lar spinning and weaving branches in England but other textile combinations are those of the Turkey Red Buyers, the Bleachers, the Calico Printers, the United Velvet Cutters, and others of the companies in certain particular branches of the industry.

In addition to the above of course is the biggest trust in the cotton industry of the world, J. & P. Coates, Ltd. This concern, with headquarters at Paisley, Scotland, has a capital of £10,917,420 or \$53,120,000 and on this enormous capital it is enabled to pay cash dividends of over 25 per cent annually. It has mills in the United States and other high tariff countries and derives more revenue from its foreign than from its home mills. This company was formed in 1896 by the combination of the two great competing thread makers, the Clarks and the Coats, to which were also joined the best of the other thread firms, with the result that J. & P. Coates today regulate the price of thread in every country in the world. In order to control their supply of fine yarn,

as they make only a portion of the yarn they need for thread, they have obtained large amounts of stock in the Fine Cotton Spinners' and Doublers' Association, Ltd. These two companies are the only amalgamations in the cotton industry that really partake of the character of trusts for on all the other lines there is too much competition for any one company to gain a monopoly.

Advertising.

Advertising does not jerk: It pulls. It begins very gently at first, but the pull is very steady. It increases day by day and year by year until it exerts an irresistible power. In order to advertise successfully you should see to it that never a paper appears without your own advertisements therein.—Exchange.

PERSONAL NEWS

Wm. H. Lane, of Chester, Pa., has accepted a position at Quitman, Ga.

G. S. Horton, of Gastonia, N. C., is now located at Kannapolis, N. C.

G. C. Wilson of the Ivey Mills, Hickory, N. C., has accepted a position at Pineville, N. C.

Zeb Clayton is now fixing looms at the Imperial Mills, Eatonton, Ga.

J. R. Manly is now overseer of carding at Williamston, S. C.

G. S. Horton has moved from Gastonia, N. C., to Kannapolis, N. C.

S. A. Crutchfield, of Hope Mills, N. C., has accepted a position at Fayetteville, N. C.

tion at Pineville, N. C.

W. J. Willett has moved from Lowell, N. C., to Kannapolis, N. C.

F. S. Dupre of Winnsboro, S. C., has accepted a position in the office of the Wylie Mills, Chester, S. C.

E. F. Cooney has accepted the position of superintendent of the Cockran (Ga.) Cotton Mills.

J. H. Ayers, of Hiddenite, N. C., has accepted a position at Lileadown, N. C.

R. G. Mimms of Canton, Ga., is now overseer of weaving at Alexander City (Ala.) Mills.

J. P. McCraw has accepted the position of overseer of weaving at the Warren Mfg. Co., Warrenton, S. C.

G. C. Wilson, of the Ivey Mills at Hickory, N. C., has resigned and is now located at Pineville, N. C.

Fred Tindall has accepted a position as machinist at the Gluck Mills, Anderson, S. C.

E. T. Porter has resigned his position at the Great Falls Mfg. Co., Rockingham, N. C., and is now located elsewhere.

Lomas H. Quinn has accepted position with the Vivian Cotton Mills at Cherryville, N. C., as overseer of the carding.

R. G. Mims, from Canton, Ga., is now overseer of weaving at Alexander City, Ala.

J. P. Scott, of Campobello, S. C., has accepted the position of master mechanic at the Athens (Ga.) Mfg. Co.

J. L. Hoover of McCall, S. C., has accepted the position of night carder and spinner at the Avon Mills, Gastonia, N. C.

Jno. W. Walters of Statesville, N. C., has accepted the position of overseer of carding at the Taylorsville (N. C.) Cotton Mill.

Rastus Kennedy has accepted a position as second hand in spinning at the Dilling Mills, Kings Mountain, N. C.

Ellis Wilson, formerly with the Columbus (Ga.) Mfg. Co., is now grinding cards at the John P. King Mfg. Co., Augusta, Ga.

Paul Tindall, of the Brogan Mills, Anderson, S. C., has accepted a position in the machine shop of the Alta Vista (Va.) Cotton Mills.

S. A. Crutchfield, formerly of Raleigh, N. C., but more recently located at Hope Mills, N. C., is now at Fayetteville, N. C.

E. F. Cooney has again accepted the superintendency of the mill at Cochran, Ga., after an absence of a year.

C. L. Enliss has resigned his position as loom fixer at Graham, N. C., and accepted a similar position with the Erwin Mill No. 2, Duke, N. C.

J. B. Knight is now overseer of spinning at Crawford, Ga.

J. J. Carnell has resigned as overseer of spinning at Crawford, Ga.

W. P. McCra has resigned as second hand of weaving with the Lydia Mills at Clinton, S. C., and has accepted a similar position with the Warren Manufacturing Company at Warrenton, S. C.

CARDS,
DRAWING,

COTTON
MILL MACHINERY

SPINNING
FRAMES,

MASON MACHINE WORKS

TAUNTON, MASS.

EDWIN HOWARD, Southern Agent
Charlotte, N. C.

COMBERS,
LAP MACHINES

MULES,
LOOMS.

Robt. W. Van Tassel has accepted position as master mechanic and chief engineer at the Massachusetts Mill in Lindale, Ga.

Frank C. Cunha has resigned his position as overseer combing at the Dartmouth Mill, New Bedford, Mass., to accept position with the

J. E. Elkin, formerly master mechanic at Ware Shoals (S. C.) Mfg. Co., is now filling a similar position at Honea Path, S. C.

seer of spinning at the Erwin Mills, No. 4, Durham, N. C., to become superintendent of the Hanes Mill, Winston-Salem, N. C.

N. C. On leaving the Woodside Mill his help presented him with a gold-mounted fountain pen.

T. B. Moore has resigned as over-

Jess Price has resigned his position as second hand of the spinning with the Dilling Cotton Mills at Kings Mountain, N. C., and is now located at Pineville, N. C.

W. J. Willett, formerly overseer of the spinning with the Majestic Mills at Belmont, N. C., but lately located at Lowell, N. C., has recently moved to Kannapolis, N. C.

Herbert Mason has resigned as section hand in spinning at the Abingdon Mills, Huntsville, Ala., to accept a similar position at the Huntsville Cotton Mills.

Chas. H. Walton had his hand painfully injured last week by catching it in the blades of the folding machine at the Deep River Mills, Randleman, N. C.

A. D. Martin has resigned his position in the Woodside Cotton Mills, Greenville, S. C., to take charge of weaving, slashing and cloth room in the Shelby Cotton Mills, Shelby,

Rastus Kennedy, formerly of the Dilling Cotton Mills at Kings Mountain, N. C., has accepted position with those mills as second hand of the spinning.

Roby Johnson has accepted position with the Ivey Mills at Hickory, N. C., having resigned a position with the Brookford Mills of the same place.

Charles Clark has resigned his position with the Ivey Mills at Hickory, N. C., and has accepted a position with the Brookfield Mills of the same place.

T. Oscar Doyle, formerly with the British Hosiery Co., Thornton, R. I., has accepted position as overseer of dyeing at the Richmond Hosiery Mills, Rossville, Ga.

Will Loftin has resigned his position with the Catawba Cotton Mills at Newton, N. C., as overseer of the night carding, and is now located at Mount Holly, N. C., where he is running speeders.

Herbert Mason has resigned the position as section hand in spinning with the Abingdon Mills, Huntsville, Ala., to accept a similar position with the Huntsville Cotton Mills of same place.

E. T. Barnes, formerly overseer of the spinning at the Granby Mills of Columbia, S. C., has accepted position with the Wallace Mills at Laurens, S. C., is overseer of the carding and spinning.

J. Foster Barnwell has been made treasurer of the Abbeville (S. C.) Cotton Mills, a position which he has filled temporarily since last November. Mr. Barnwell has been with the mills as book-keeper for a number of years.

OVERFLOW PERSONALS PAGE 16



CAPACITY 1000 POUNDS LINT PER HOUR.

"Cleaner Cotton for Cotton Mills!"

Why not clean your cotton as it is being opened?

Two processes in one operation.

We court your investigation.

"The C. O. B. Machine"

MANUFACTURED BY

EMPIRE DUPLEX GIN COMPANY, 68 William St., New York

Southern Representative

"He will tell you all about it."

J. S. COTHRAN, Charlotte, N. C.

MILL NEWS ITEMS OF INTEREST

Talledega, Ala.—All of the mills at this place are now running full time.

Gastonia, N. C.—All of the mills at this place were closed down last Saturday on account of the funeral of George A. Gray.

Lynchburg, Va.—The Cone Export & Commission Co. announce a further advance of 1-8 cent a yard on Lynchburg Cotton Mill sheetings.

Anderson, S. C.—The Brogon Mills have just received 36 new model Draper looms. The erection of another cotton warehouse has begun.

Chattanooga, Tenn.—The Davis Hosiery Mills, of this place have completed a new building 64x224 feet. It is two stories high and will be used for dyeing and drying. This addition to the plant will give employment to more than 200 additional people.

Robersonville, N. C.—The Robersonville Hosiery and Manufacturing Company has not yet installed machinery in the plant. The building for the company has been erected, but no further progress made. It is said they are interested in securing some one to furnish capital.

Tallahassee, Fla.—The Tallahassee Falls Manufacturing Company, which operates two large cotton mills at this place, and which owns several thousand acres of land in this section of the country, has decided to sell the land. It will be sold to farmers, with the understanding that no one man is to buy more land than he can cultivate.

Jackson, Tenn.—The Jackson Woolen Mills, for many years one of the leading manufacturing concerns of this city, will in all probability move to New York city within the next few months. It was learned from President Cantrell that while the decision to move is not final, it would be greatly to the interest of the firm to establish itself in New York city.

Siluria, Ala.—The Buck Creek Cotton Mills are now about completed. The main building is 565 feet long by 77 feet wide and two stories high. It contains spooling, slashing, weaving and accompanying machinery on the ground floor, while the carding and spinning department is installed on the second floor. The machinery includes 20,000 spindles and 600 automatic looms. The capacity per week is approximately 50,000 pounds of drills and sheeting and about three hundred operatives will be employed. The company is at present developing its own electric power.

Cleveland, O.—Articles of incorporation have been issued to the American Textile Manufacturing Company, of this place. The capital stock of this new concern is placed at \$10,000. The incorporators are as follows: Carl R. Brown, Charles B. Bayly, Charles W. Saeltzler, John B. Oviatt and Lena A. Gregg.

Springfield, Tenn.—The Springfield Woolen Mills Company is contemplating the installation of another complete set of machinery. This equipment will consist of one set of cards, four broad looms, burr picker, mixing picker, etc. The addition of this new machinery will bring the company's equipment up to a five-set mill, having 52 broad looms and 10 mules.

Salisbury, N. C.—Judge Ferguson has appointed S. B. Alexander, Jr., of Charlotte, N. C., receiver for the Grace Mills, of this place, which has been standing idle for some time. This is a Jacquard mill, having an equipment of 40 looms and accompanying machinery, the product being damasks. It is a \$15,000 enterprise and F. L. Robbins, president and treasurer, months.

Gastonia, N. C.—As successor to the late George A. Gray, L. L. Jenkins of Asheville, a large stockholder, was elected president of the Gray Mill. Thomas L. Craig was elected vice president, and J. H. Seppark and J. L. Gray—the latter a son of the deceased—were re-elected secretary-treasurer and superintendent respectively.

Rome, Ga.—The Rome Hosiery Mills have increased their equipment to 277 knitting machines, 35 loopers and 14 sewing machines. They buy 11s, 14s, 16s, 18s and 50s yarns. About a month ago they added to their output a line of misses hosiery, making necessary these additions to their equipment. H. R. Berry is secretary-treasurer and the buyer.

Greenville, S. C.—On Thursday the American Machine & Manufacturing Company, the latest addition to Greenville's manufacturing industries, will begin operation, according to A. D. Kennedy, assistant manager of the company. Carloads of machinery are arriving daily for the plant, and being installed as rapidly as possible.

The new concern will manufacture all machinery needed in the running of oil mills, making complete plants. Parts for cotton mills will also be manufactured. Among other specialties to be made by the company will be refrigerating plants, fertilizer machinery, waste cleaning and reducing machinery, etc.

Dallas, N. C.—By virtue of an order of sale made at the January term of Gaston Superior court the Dallas Cotton Mill will be sold at the court house door in Gastonia next Thursday afternoon, February 15, at 2 o'clock to the highest bidder. This mill was some time ago sold to Col. C. B. Armstrong for \$20,000 but this bid has been raised to \$22,000, and bidding Thursday will begin at this figure.

Humboldt, Tenn.—The annual meeting of the stockholders of the Humboldt Cotton Mills was recently held at this place. Reports from the officers of the company showed that the year had been a prosperous one for the mills, which had yielded a good profit. The board of directors elected officers for the company as follows: W. W. Baird, president; C. H. Ferrell, vice-president; J. R. Jarrell, secretary, and A. L. Dodson, treasurer.

Chester, S. C.—The Springstein Mills will replace many of their old style looms with automatic ones, contracts having been awarded for one hundred new machines. These new looms will be furnished by the Crompton and Knowles Loom Works, Worcester, Mass., and each loom will have a weekly capacity of 3,000 yards of cloth. This company is capitalized at \$500,000 and its plant includes 14,112 ring spindles, 700 looms and accompanying machinery, driven by electric power. The output, which is dressed ginghams, is dyed and finished at the mill.

Newton, N. C.—The mill building erected by the Ridgeview Cotton Mills Company several years ago, but which has never been equipped for manufacturing, has been bought by J. H. Shuford, of Hickory, N. C. Mr. Shuford intends to utilize the building for the manufacture cotton yarns. He has is an experienced cotton manufacturer and purchased the Ridgeview property with a view of installing 5,000 spindles and accompanying machinery. The equipment of the mill will represent and investment of from \$80,000 to \$100,000 for machinery alone.

Kinston, N. C.—The fourteenth annual meeting of the Kinston Cotton Mill stockholders was held this afternoon. The reports of the officers of the mill were very gratifying to the shareholders, notwithstanding the dreadful condition of the yarn market for the past three years. A dividend of 4 per cent. was declared from the earnings of the past year. The former board of directors was re-elected, as were the previous officers. J. F. Taylor, president of the Southern Soft Yarn Spinners' Association, is the treasurer and general manager of this mill.

Columbia, S. C.—The Senate has yet to act on the governor's message referring to the penitentiary situation and the hosiery mill, which the governor wants abandoned. This matter has been referred to a committee for investigation, and the Senate has said, in substance, that it wants every charge the governor has made thoroughly investigated.

Nashville, Tenn.—The Nashville Hosiery Mills, which resumed operation a short time ago, are getting well under way. The company has about 100 operatives at work, but has machinery for 300 or 400. The company has difficulty in getting skilled operatives. Jesse H. Thomas and J. H. McPhail are the principal owners of the company. The plant closed down about one year ago on account of the high prices of the raw material proving disastrous to business. The members of the company now regard the outlook as very favorable for developing the large trade enjoyed in the past.

Columbus, Ga.—The State game and fish warden is of the opinion that the dyes coming from the textile plants along the Chattahoochee River kill the fish in the stream. He is quoted as saying that there could be and would be \$500,000 worth of fish produced in the Chattahoochee, but for the fact that the poisonous dyes from the mills along the river are allowed to run into the channels. He is conferring with the mill managers, with a view of disposing of the dyes without injury or loss to the mills. He is also getting up data to present to the Legislature, to urge such legislation as will protect the fish. Some of the mill interests are co-operating with the Commissioner while others are of the opinion that they cannot dispose of the dyes without turning the fluid into the river.

Greenville, S. C.—At a meeting of the creditors of the Gilreath Manufacturing Company, it was decided that the receiver, F. W. Symmes should continue the business of the company and complete the delivery of all contracts held by the company on orders for spring. It was brought out at the meeting the liabilities of the company are about \$90,000 and the quick assets about \$75,000.

The Gilreath Manufacturing Company was incorporated in May, 1910, with an authorized capital stock of \$50,000, of which \$10,000 was paid in at the start. The officers of the incorporation were: J. D. Gilreath, president and treasurer; J. M. Geer, vice president; J. E. Johnston, secretary.

On April 5th, 1911, the company claimed assets of \$45,280, over liabilities of \$44,330.

Textile Bank.

The Textile Bank is the latest institution added to the mill villages. It is as strong as Gibraltar, and the special pride of Caesar Cone, who is president. This is one of the rock-ribbed banking institutions in North Carolina. The operatives are encouraged to place their surplus funds in the savings department, where 4 per cent interest is paid.

J. H. Cole is cashier, and is receiving a hearty welcome from our people. The success of this bank is assured. Three thousand six hundred well paid employes should make any bank prosperous.—Greensboro News.

Cotton Mills Will Not Be Combined.

The combination of the Langley, Aiken and Seminole Manufacturing Companies, by the purchase of the other two properties by the Langley company, as announced recently, will not take place. This was the final decision reached last week.

Thomas Barrett, Jr., president of the three separate companies stated that owing to the fact that so many of the minority stockholders of the companies were opposed to the consolidation, that at the joint meeting of the stockholders of the three companies, it was decided in deference to the wishes of these minority stockholders to operate the companies separately as in the past.

Mr. Barrett stated that there will be no change of officers or management, but that the companies will be operated as before the proposed consolidation.

Knitting Mill Conditions.

Raleigh, N. C.—According to report just issued by Commissioner of Labor and Printing M. L. Shipman, sixty-five knitting mills are reported for North Carolina during 1911 and 54 of them show a capital stock of \$3,043,125. The number of spindles in use in these mills is given as 48,892; knitting machines, 7,762; sewing machines, 583; making use of 4,735 horsepower. Seven do not report horsepower.

Thirty-two mills use steam for power; thirteen use electricity; nine gasoline, four electricity and steam, three water, one electricity and gas, three do not give power used.

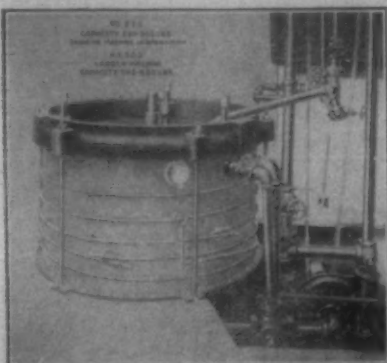
Number of employes reported is 6,475; 2,302 males and 3,590 females; three mills, employing 583 do not classify employes. Fifteen thousand seven hundred and sixty-six persons are dependent on the operation of these mills for a livelihood.

Wages are as follows: High average, males, \$2.29; low average, males 62 cents; high average, females, \$1.44; low average, females, 51 cents. Employes of twenty-two mills are paid weekly; twenty-nine

Economical Cotton Dyeing and Bleaching

In the Psarski Dyeing Machine

Saves Labor
Saves Dyes
Saves Drugs
Saves Steam
Saves Water



Saves
Fibre



Sulphur—Developed—Vat Dyes
Done Equally Well

RAW STOCK DYEING—The cotton goes to cards in as good condition as directly from bales. Is not rolled into balls and strings.

BLEACHING—Bleached and washed PERFECTLY CLEAN—FREE FROM CHLORINE OR ACID. 3 1/2 hours to batch. Is not pounded and twisted into practically waste.

SKEIN DYEING—No Boiling Out—No Tangles—Yarns are left Smooth and in perfect condition for winding, knitting, etc.

HOSIERY—Recommended size of machine does 300 pounds to batch, SULPHUR OR DEVELOPED BLACKS. It is not Roughed—No Singeing required—No Sorting—No Damaged.

15 to 20 per cent Saving in Drugs

The Psarski Dyeing Machine Co.
3167 Fulton Road CLEVELAND, OHIO

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364 Newport Avenue
Milwaukee, Wis.

R. D. BOOTH, Agent
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Atlantic City, N. J.

Textile Directories

Clark's Directory

OF

Southern Cotton Mills

Pocket Size \$1.00

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BY DAVIDSON PUBLISHING CO.

Office Edition \$4.00 Traveling Edition \$3.00

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CHARLOTTE, N. C.

mills, semi-monthly; three monthly, two mills do not answer. The average number of hours worked a day is nine hours and thirteen minutes.

Twenty-nine mills report no change in wages; twenty-three report wages increased; one mill reports decrease; five mills do not answer the question. Forty-two mills report financial condition of employes improved; nine report that it is not improved; five do not answer.

General proficiency is reported improved from forty-three mills; five that it has not improved; eight do not report.

State Cotton Warehouses.

The one outstanding defensible reason for a bill such as that now before the General Assembly "To Create and Operate a State Warehouse System for Storing Cotton," is the necessity for protecting the great wealth-producing industry of the South from the perils and disasters incident to the precipitate marketing of millions of bales of renters and croppers and other financially weak and unorganized producers of cotton.

The justification for an appreciation of public money to do that which is ordinarily a commercial function would rest in the certainty that such participation by the State is for the general good.

It seems to us, therefore, that to justify such a radical move on the part of one State it is essential to have the guaranteed co-operation of a sufficient number of other cotton-producing States to make the plan effectual. Leadership is a fine thing, but before one company of a body of troops goes forward to charge a regiment its commander, unless he would sacrifice his men uselessly, has the assurances of the support of other companies of his comrades. The expenditure by South Carolina of a quarter of a million dollars in this enterprise should be conditioned upon the participation of other cotton-growing States.

And in any event the personnel of those having charge of the warehouse system would be of great importance. It is proposed to create a business whose success is dependent not alone on the integrity of those in control of it, but upon their business sense and ability being of the highest, and with wide business experience.—Columbia State.

Photographer—I have been taking some moving pictures of life in your mill.

Superintendent—Did you catch my operatives in motion?

Photographer—I think so.

Superintendent—Ah, well, science is a wonderful thing.—Exchange.

AMERICAN MOISTENING COMPANY

BOSTON, MASSACHUSETTS

WILLIAM FIRTH, President

FRANK B. COMINS, Vice-Pres. & Treas.

THE ONLY PERFECT SYSTEM OF AIR MOISTENING
COMINS SECTIONAL HUMIDIFIER

JOHN HILL Southern Representative. Third Nat. Bank Building, ATLANTA, GEORGIA

Cotton Goods Report

New York.—Advances were named during the week on gray goods which served to make the selling margin on lines of percales very narrow.

The belief is growing among the jobbers that advances will shortly be named on some well known tickets, and a few of the largest houses have been quietly covering at current price levels, in anticipation of an upward movement. While there has been further talk through the market as to the possibility of an advance on prints and gingham, the question is still an open one. Jobbers are likely to go ahead and move out the stocks they have on hand at the present time, before they make any attempt to place additional orders for prints. On gingham prices for fall have been announced on well known lines, and show no change from those previously in force. It is hardly likely that there will be any chance on these lines, jobbers state, unless there is an unusually sharp upward turn in the cotton market. In the meantime, however, print cloths have been marked up rather sharply this week on both narrow and wide goods, and this is causing printers and converters to look more closely at their selling prices for the finished goods. Cotton yarns were advanced again in several quarters during the day, and some commission houses here state that they cannot get deliveries with which to meet the demand. Some prominent Southern spinners are now stated to be sold ahead for June-July delivery, while other mills are also getting in a more or less sold up position. On knitting yarns quite a few mills are now reported to be sold ahead for June and July, while on weaving yarns several spinners are sold through for May to July delivery. On weaving counts some commission houses were forced to mark up their prices yesterday anywhere from 1-4 to 1-2 cent a pound, in addition to advances already made earlier in the week. Offers made in one quarter for 30s two-play warps at 23 cents, were turned down by the spinner, with statements that sales had already been made at 23 1-2 cents. Open quotations in this market stand at 22 1-2 cents to 23 cents a pound. Carpet and rug lines are moving rather slowly, with here and there moderate reorders coming forward.

The Fall River print cloth market continued active last week and sales were larger than for any previous week for several months, in spite of the fact that there was a firm tone on the part of manufacturers and an advancing tendency of prices. Some of the manufacturers, who were trading quite freely, dropped out of the market altogether, on account of the advancing prices in the cotton market. Better prices in the cloth market have been insisted on by all who have been willing to trade. For the first

time in many weeks, all are insisting on prices which will not only let them out, but also allow them a profit, which however, will be small.

The prices paid for narrow goods in printers' styles were on a basis of 3 1-4 cents for regulars, and wide goods at 3-9 cents for standards. Nearly all the styles in demand advanced a sixteenth of a cent over the previous week in prices now freely offered and an eighth of a cent over the previous week over prices that ruled two weeks ago.

Prices on cotton goods were quoted in the New York market as follows:

Pt. clths, 28-in., std.	3 1-4	—
28-in., 64x60s	3 1-8	—
Gray goods, 39-in.,		
68x72s	5	—
38 1-2-in., stds	4 3-8	—
4-yd 80x80s	6	—
Brwn drills, stds.	7 1-2	—
Shigs, south., std	7 1-4 to 7 1-2	—
3-yd	6 3-4	7
4-yd, 56x60s	5	—
Stark, 8-ounce duck	12 1-2	—
Hartford, 11-ounce,		
40-in. duck	15 1-8	—
Tickings, 8-oz.	12 1-2	—
Std fancy prints	4 3-4	—
Std gingham	6 1-4	—
Fine dress ging.	7	to 9 1-4
Kid fin. cambrics	3 3-8	to —

Weekly Visible Supply of American Cotton.

February 9, 1912..	4,975,651
Previous week..	4,960,413
Last year..	4,027,374

Weekly Cotton Statistics.

New York, Feb. 9.—The following statistics on the movement of cotton for the week ending Friday, February 9, were compiled by the New York cotton exchange:

WEEKLY MOVEMENT.

	This Yr.	Last Yr.
Port receipts...	379,768	179,146
Overland to mills and Canada...	26,225	32,498
Southern mill takings (est.)	65,000	32,498
Loss of stock at interior towns.	35,804	34,764

Brought in sight for week...	435,789	222,168
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TOTAL CROP MOVEMENT.

	This Yr.	Last Yr.
Port receipts...	9,169,247	7,395,688
Overland to mills and Canada...	558,562	709,938
takings (est.)	1,845,000	1,510,000
Southern mill Stock at interior excess of Sept. 1	602,849	518,245

Brought in sight for season....12,175,663 10,133,871
One thousand seven hundred and seventy-five bales deducted from receipts for the season.

GRINNELL WILLIS & COMPANY

44-46 Leonard Street, New York

SELLING AGENTS

BROWN AND BLEACHED COTTON GOODS FOR HOME EXPORT MARKETS



Independence is our motto, and we have no connection with any other Ring Traveler Company.

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Clays in the South

The U. S. Government report shows that the value of brick and tile manufactured from clay in Pennsylvania for 1909 exceeded twenty million dollars.

We can show limitless deposits of superior clay in easy reach of reasonable priced electric power, where transportation facilities offer a very wide distribution.

An ideal location for a large plant. For particulars address

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General Industrial Agent, Seaboard Air Line Railway

NORFOLK, VIRGINIA.

FOR SALE OR RENT

Large cotton mill buildings, without machinery, situated adjacent to a good hydro-electric power plant, in a prosperous Southern city. Twenty-one tenement houses, ready for immediate occupancy, go with the property. Local capital available to right parties.

Also a smaller mill, with machinery complete, suited for making cotton yarns: Most liberal propositions made if right party can be obtained. Refer to file No. 7500 for further information.

M. V. RICHARDS

Land and Industrial Agent

Southern Railway

Room J

WASHINGTON, D. C.

The Yarn Market

Philadelphia, Pa.—There was a moderate volume of business transacted in the yarn market last week. The buying was mostly for prompt or near deliveries and the quantities were small, ranging from a single bale to a dozen bales. Only a few weavers cared to buy very far ahead on carded yarns, though there was a moderate demand for combed yarns from both weavers and knitters. Prices moved upward at the close of the week, but they were very firm.

Weavers were active buyers in all numbers from 4-1 to 40-2 in skeins and warps. The quantities purchased were usually small, ranging from one to one dozen bales for prompt deliveries. Many buyers covered their needs long ago at prices much better than those now prevailing, but they are not getting agreed deliveries. Some numbers are scarce and dealers bought one and two bales from each other to tide customers over until yarn now in transit arrives.

Some manufacturers of staple dress fabrics in cotton and worsted are doing a good business. At the present time the attention of many manufacturers is centered on goods made from fancy yarns. Many of them have gotten out samples, and practically every weaver of dress goods, or those who could weave them, has purchased a sample lot of yarns. In making fancy yarn, many spinners saw a possible golden opportunity and almost as many kinds of fancy yarns have been put on the market as there are different makers. It now looks as if the yarn and cloth end would both be overdone.

Southern Single Skeins.

8s	15 1-2-16
10s	16 —
12s	16 1-2
14s	16 1-2-17
16s	17 —17 1-2
20s	17 1-2-18
26s	19 1-2
30s	20 1-2

Southern Two-Ply Skeins:

8s	16 —
10s	16 1-2
12s	16 1-2
14s	17 —
16s	17 —18
20s	18 —18 1
24s	19 1-2
26s	20 —
30s	20 1-2-21
40s	20 1-2-21
40s	26 —27
50s	32 —
60s	39 —40

Carpet and Upholstery Yarn Skeins:

8-3 hard twist	15 1-2-16
8-4 slack	17 1-2-18
9-4 slack	18 —18 1

Southern Single Warps:

8s	16 —
10s	16 1-2-17
12s	17 —
14s	17 —17 1-2
16s	17 1-2-18
20s	18 —
24s	25 —
26s	20 1-2
30s	21 1-2-22
40s	27 1-2

Southern Two-Ply Warps:

8s	16 1-2
10s	17 —
12s	17 1-2
14s	17 1-2
16s	18 —18 1-2
20s	19 1-2-20
24s	20 —20 1-2
26s	21 —21 1-2
30s	22 —22 1-2
36s	24 1-2-25
40s	27 1-2-28

Southern Frame Spun Yarn on Cones

8s	16 —
10s	17 —17 1-2
12s	17 1-2
14s	17 1-2-18
16s	18 —18 1-2
18s	18 1-2-19
20s	19 —19 1-2
22s	19 1-2-20
24s	20 —20 1-2
26s	21 —
30s	22 1-2
40s	27 —

Single Skeins Carded Peeler:

20s	22 1-2-23
24s	24 —
26s	24 1-2
36s	25 1-2-26
40s	29 —30
50s	37 —

Two-Ply Carded Peeler in Skeins:

20s	23 —
22s	23 1-2
24s	24 —
26s	24 1-2
30s	26 —
30-1 Cs	31 —31 1-2
36s	21 1-2
40s	29 —30
50s	27 —37 1-2
60s	42 —42 1-2

A. M. Law & Co. F. C. Abbott & Co

Spartanburg, S. C.

Charlotte, N. C.

BROKERS

BROKERS

Dealers in Mill Stocks and other
Southern Securities

Southern Mill Stocks, Bank Stocks,

N. C. State Bonds, N. C. Rail-

road Stock and Other High
Grade SecuritiesSouth Carolina and Georgia Mill
Stocks.

North Carolina Mill Stocks.

	Bid	Asked		Bid	Asked
Abbeville Cotton Mills	70	75	Arlington	140	
Aiken Mfg. Co.	85		Atherton		
American Spinning Co.	162		Avon		
Anderson C. Mills pfd	90		Bloomfield	110	
Aragon Mills	65		Brookside	100	105
Arcadia Mills	93		Brown Mfg. Co.	100	110
Arkwright Mills	100		Cabarrus	131	
Augusta Factory, Ga.	60		Cannon	120	141
Avondale Mills, Ala.	116		Chadwick-Hoskins	95	
Belton Cotton Mills	130		Chadwick-Hoskins, pfd.	100	
Brandon Mills	93		Clara	110	
Brogan Mills	61		Cliffside	190	200
Cabarrus	130		Cora	135	
Calhoun Mills	61		Dresden	136	
Capital Cotton Mills	80	85	Dilling		
Chiquola Mills	167		Efird	100	125
Clifton	75	85	Elmira, pfd.	100	
Clinton Cotton Mills	125		Erwin Com	120	
Courtenay Mfg. Co.	95		Erwin, pfd	101	102
Columbus Mfg. Co., Ga	95		Florence		126
Columbus Mfg. Co., Ga	92 1/2	100	Flint	130	
Cox Mfg. Company	70		Gaston	90	
Eagle & Phenix Ga.	117		Gibson	70	
Easley Cotton Mills	160	165	Gray Mfg. Co.	121	
Eneoree	45		Highland Park	150	200
Eneoree Mfg. Co., pfd.	100		Highland Park, pfd.	101	
Enterprise Mfg. Co., Ga	75		Henrietta	170	
Exposition Cot. M., Ga.	210		Imperial	101	106
Fairfield Cotton Mills	70		Kesler	125	140
Gaffney Mfg. Co.	60		Linden		
Gainesville C. M. Co. Ga	80		Loray, pfd	90	94
Glenwood Mills	141		Lowell	181	
Glenn-Lowry Mfg. Co.	101		Lumberton	251	
Glenn-L. Mfg. Co., pfd	95		Mooreville	123	
Gluck Mills	100		Modena	90	
Granby Cot. Mills, pfd.	38		Nokomis, N. C.	200	
Graniteville Mfg. Co.	160	165	Ozark	92	110
Greenwood Cotton Mills	57	59	Patterson	110	121
Grendel Mills	100		Raleigh	100	
Hamrick Mills	100		Roanoke Mills	155	161
Hartsville Cot. Mills	190		Salisbury	136	
Inman Mills	105		Statesville Cot. Mills	96	
Inman Mills, pfd.	101		Trenton, N. C.		
Jackson Mills	95		Tuscarora	90	
King J. P. Mfg. Co., Ga	85	100	Washington, pfd	101	
Lancaster Cot. Mills	130		Washington	20	30
Lancaster C. Mills, pfd	98		Wiscasset	103	125
Langley Mfg. Co.	60		Woodlawn	100	103
Laurens Cot. Mills	125				
Limestone Cot. Mills	175		Parker Mills com.	25	
Lockhart Mills	10		Piedmont Mfg. Co.	160	
D. E. Converse Co.	65		Pelzer	138	140
Dallas Mfg. Co., Ala.	110		Pickens Cotton Mills	94	
Darlington Mfg. Co.	75		Piedmont Mfg. Co.	160	
Drayton Mills	95		Poe, F. W. Mfg. Co.		
Marlboro	75		Riverside		

Personal Items

G. W. Hayes has moved from Summerville, Ga., to Trion, Ga.

C. C. Simons, formerly of Rock Hill, is now fixing looms at the Springstein Mill, Chester, S. C.

J. H. Separk has been elected treasurer of the Gray Mfg. Co., Gas-tonia, N. C.

W. E. Diggle has resigned his position with the dye plant at the Springstein Mills, Chester, S. C.

L. E. Colvin has accepted a position with the dye plant at the Springstein Mills, Chester, S. C.

J. F. Stegall, of Gibsonville, N. C., has accepted a position with the Springstein Mills, Chester, S. C.

J. C. Suttles has accepted position as overseer of weaving at the Valley Falls Mfg. Co., Spartanburg, S. C.

T. J. Jones has accepted position as overseer of spinning at the Girard (Ala.) Cotton Mills.

J. C. Jordan, of the Locke Mill, Concord, N. C., has accepted a position at Kannapolis, N. C.

J. M. Talbert has resigned as overseer of spinning at the Buffalo Mills, Concord, N. C.

C. E. Kestler, of the Calvine Mills, Charlotte, N. C., is now overseer of carding at the Paola Mills, Statesville, N. C.

L. W. Redd, of Calhoun Falls, S. C., has accepted the position of superintendent of the Palmetto Mills, Columbia, S. C.

C. F. Tompkins has resigned as stenographer at the Lumberton (N. C.) Cotton Mills and returned to his former home at Baltimore, Md.

G. W. Underwood, of the Pomona Mills, Greensboro, N. C., has accepted a position with the Wylie Mills, Chester, S. C.

R. A. Farr, of the Pomona Mills, Greensboro, N. C., has accepted a position with the Wylie Mills, Chester, S. C.

L. L. Jenkins has been elected president of the Gray Mfg. Co., Gas-tonia, N. C., to succeed the late Geo.

R. K. Simpkins has resigned as section hand at the Columbus (Ga.) Mfg. Co., to accept a similar position at the Girard (Ala.) Cotton Mills.

David Hathcock, who has had charge of the humidifying system of the Locke Mills, Concord, N. C., has resigned to accept a position with the American Moistening Co.

Geo. D. Simpkins has resigned as section hand at the Abingdon Mills, Huntsville, Ala., to accept position as second hand in spinning at the Girard (Ala.) Cotton Mills.

R. A. Farr has resigned as section hand in carding at the Pomona Mills, Greensboro, N. C., to accept a similar position with the Wylie Mills, Chester, S. C.

A. L. McCombs, formerly with the New Holland Mills, Gainesville, Ga., has accepted position as overseer cloth room at the Grendell Mills, Greenwood, S. C.

Robt. G. Campbell, for seven years general superintendent of the White Oak and Proximity Cotton Mills, Greensboro, N. C., has resigned, to take effect March, 1st.

New Plant For Southern Power Co.

The Southern Power Company has decided to erect another plant and are now considering the location for the new station.

Mt. Holly, N. C., is very desirous of securing the plant and recently sent a delegation to Charlotte to confer with the officials of the Power Co. and offer them inducements to put the plant at Mt. Holly. Charlotte's interests are also being looked after in the matter.

The new plant will be of 1,000 horsepower capacity and will furnish light as well as power.

Geo. A. Gray Dead.

Geo. A. Gray, one of the pioneer and most successful cotton manufacturers of the South, died at Gas-tonia, N. C., last Thursday.

Three weeks ago Mr. Gray was operated on for appendicitis and while he was thought to be recovering splendidly from the operation, pneumonia developed and his sudden death followed Thursday.

Starting life as a doffer by at a wage of 30 cents a day, unable to read or write when he entered the cotton mill, at the time of death he owned considerable stock in a number of the most successful plants in the State. He leaves a widow and

Cottage Burned at Anderson.

A four-room cottage, occupied by Dug Smith and J. G. Moore, at the Riverside Mills, Anderson, S. C., was burned last week, and most of the effects of the occupants were destroyed.

Lost His Right Hand.

Fletcher Newman, a young man who is employed at the Dixie Mills, Mooresville, N. C., sustained the loss of his right hand last week while at work in the card room at the mill. His hand became caught in the machinery and was so badly mutilated that amputation was necessary.

Argentina To Start Cotton Farm Colony.

Argentina, South America, has begun a campaign to promote and encourage there the cultivation of cotton. A decree forming the first cotton growing colony has been issued by the ministry of agriculture. This colony is known as La Cooperacion, comprises about 60 miles in Chaco province along the Resistenciato-Mejan Railway, divided into small farms of 125 to 250 acres. They are to be offered to immigrants, who at the end of the present harvest season desire to remain in Argentina, with the express provision that the cultivation of cotton alone must be undertaken thereon.

Dogs.

Up in the mountains or on the farm, a dog is a good thing to have around a house to watch the barn and to hunt with occasionally, but we know of no place where a dog is so useless as at a cotton mill. The people here do not hunt and they have no time to train dogs if they did hunt. Most of the dogs around our mills are common curs, fit for nothing but to destroy the gardens of the neighbors, to eat about as much as a hog would eat or cost as much to keep as it would to feed a child; to bark sometimes, and occasionally bite an innocent child who happens to be walking along the street. The number is decreasing fast and we hope it will not be long before they will all be out of the village. Sometimes dogs go mad and then they are dangerous. We have known of two instances in one of our villages when a person took his life into his hands to go into the street, not that there

but from the guns and pistols in the hands of excited men and boys shooting recklessly all over the village. They did not hit the dogs either, but they came near hitting several people. Sit down and make the calculation: how much has your dog been worth to you this year. If he has not paid, give him away, or better still, cut off his tail—right behind his ears.—The Pacomico.

Census at Woodside.

Tuesday and Wednesday of this week were set aside for taking the census at the Woodside Mills village, Greenville, S. C. An enumeration of the population of Woodside is had every year, the figures last year giving the population of the village as 1,500. Much moving in and out has occurred during the last year, but it is not thought that there will be a decrease in the number of inhabitants when the returns are had. It is thought by many that a decided increase will be shown.

The census is taken at the expense of the Woodside Cotton Mills. Two enumerators are employed by the mill company, and the methods used are similar to those used in taking the government census.

Columbia, Tenn.—At a meeting of the stockholders of the Columbia Cotton Mills, the following directors were elected: J. P. Street, Ernest E. McLemore, Horace Rainey, W. A. Dale, John W. Shelton and Dr. Otey J. Porter. These directors in turn elected the officers of the mills as follows: J. P. Street, president; Ernest E. McLemore, vice-president; W. F. Embrey, secretary and treasurer. Since the company resumed operations about a month ago, as noted, after an idleness of two years, the plant has been running full time and having no trouble in disposing of their output. More than 100 operatives are employed at present, but it is found that this number will have to be increased.

Overseer Badly Cut.

As a result of a cutting affray at the Anchor Duck Mills, Rome, Ga., Monday morning, Quigg McKenzie, a young white man is in the county jail charged with assault with intent to murder in default of a \$500 bond, and John C. Ellis, overseer of the spinning department of the mills is suffering with seven serious wounds on his face, neck and shoulder.

Young McKenzie, who is a former employe of the mills, had gone to the spinning room without a pass from the superintendent, and refused to leave. When Ellis proceeded to eject him from the room, McKenzie got out his knife, and before he could be stopped, had cut the overseer about the face, neck and left shoulder seven times.

Sunday School Teacher — Now, boys, what would you say if you had been Lot fleeing from the burning city of Sodom, and you had seen your wife stop and look back? Little Boy (at end of class)—Rubber.—Exchange.

Want Department

Want Advertisements.

If you are needing men for any position or have second hand machinery, etc., to sell, the want columns of the Southern Textile Bulletin afford a good medium for advertising the fact.

Advertisements placed with us reach all the mills.

Employment Bureau.

The Employment Bureau is a feature of the Southern Textile Bulletin and we have better facilities for placing men in Southern mills than any other journal.

The cost of joining our employment bureau is only \$1.00 and there is no other cost unless a position is secured, in which case a reasonable fee is charged.

We do not guarantee to place every man who joins our employment bureau, but we do give them the best service of any employment bureau.

Wanted.

Full set of help for night un, run five nights, pay for six. If help must be over 16 years old or night work. Can use a few more on day run. Wanted especially Spinners, Doffers, Spoolers, feel Hands. Good healthy place, good running work all on 40-2 wet waste. Apply in person or write. C. H. Goodroe, Supt., Yazoo Yarn Mill, Yazoo City, Miss.

WANT position as superintendent. No employed but wish to change on account of health of locality. Have had long experience and can give satisfaction. References will be furnished on application. Address No. 99.

WANT position as superintendent. Have had long experience and have operated some of the best mills in the South. Resigned last position on account of illness from which have now recovered. Can furnish satisfactory references and can get results. Address No. 100.

WANTED — Position as second hand of carding in large mill or overseer in small mill. Five years experience as second hand. Married; age 25 years. Good references. Address No. 101.

WANT position as overseer of spinning, spooling and warping. Now employed but would prefer to change. Long experience and satisfactory references. Address No. 102.

WANT position as overseer of spinning. Now employed but want larger job. Can furnish good references from present or former mills. Address No. 103.

WANT position as overseer of carding. Experienced on No. 8s to 40s. Good manager of help. Age

30. Strictly sober. Best of references as to character and ability. Address No. 104.

WANTED—Position as overseer of cloth room. Am at present employed handling product of 1,700 looms on export and domestic. Have 14 years' experience as overseer with some of largest mills in South. Can furnish necessary reference as to integrity and ability. Prefer location in upper Carolina. Address No. 105.

WANT position as overseer of weaving. Experienced on plain and Draper looms and check work. Am also a designer and experienced finisher. Held last job 7 years. Good references. Address No. 106.

WANT position as overseer of spinning. Have eight years experience as overseer. Am 28 years old and have good references. Not interested at less than \$2.75. Address No. 107.

WANT position as overseer of weaving, 12 years experience with good mills. Best of references. Address No. 108.

WANT position as overseer of carding. Now employed but desire larger room. Have had good experience and have held present position for six years. Address No. 109.

WANT position as carder or spinner. Seven years as machinery erector and overseer of carding and spinning. Married. Age 35. Good references. Address No. 110.

WANT position as superintendent at not less than \$2,000 Now employed, but would prefer to change. Good references as to both character and ability. Address No. 111.

WANTED position as overseer of weaving. 36 years of age. Married. Strictly sober. Good manager of help. Won't consider anything less than \$2.50 per day. Can furnish good reference from present and past employers. Address No. 112.

WANT position as overseer of finishing or weaving or both. Have had long experience and can furnish first class references. Address No. 113.

WANT position as superintendent. Had long experience on many lines of goods and can get quality and production. Sober and reliable. Address No. 114.

WANT position as overseer of carding. 7 years card grinder. 4 years second hand. 3 years as overseer on present job. Married.

Good references as to habits and work from present and former employers. Address No. 115.

WANT position as overseer of spinning in large mill or superintendent of yarn mill. Have had long experience and am now employed Address No. 116.

WANT position as overseer of spinning. Have had 12 years experience on white and colored work both coarse and fine. Age 44 Strictly sober. Address No. 117.

WANT position as superintendent or overseer of carding and spinning. Now employed. Long experience and good references. Address No. 118.

WANT position as overseer of carding in large mill. Married. Sixteen years experience and am now employed but prefer to change. Address No. 119.

WANT position as overseer of carding. 36 years old, married and can furnish best of references. Now employed in large mill but wish to change. Address No. 120.

WANT position as overseer of carding. Five years as overseer. Experienced on combers and fine yarns. Age 32. Good references. No. 121.

WANT position as overseer of spinning. 10 years experience as overseer. Age 30. Married. Good references. Address 121.

WANT position as overseer of weaving. 10 years experience as overseer and now employed but desire to change for good reasons. Fine references. Address No. 122.

WANT position as overseer of carding. 17 years in card room. 7 years experience as overseer. Can furnish good references. Address No. 123.

WANT position as chief engineer or master mechanic. Have had long experience and can give satisfactory references. Address No. 124.

WANT position as superintendent, or overseer of carding in large mill. Have had 25 years experience as machinist, carder and spinner. Now employed. Age 37. Married. Can furnish best of references. Address No. 125.

WANT position as superintendent, or overseer of large weave room. Have had long practical experience and can furnish satisfactory reference. Address No. 126.

WANT position as engineer and machinist. Now employed but could change on short notice. Can furnish good references. Address No. 127.

WANT position as overseer of carding; or carding and spinning in small mill. Age 34. Married.

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Long experience. Can furnish good references. Address No. 128.

WANT position as superintendent of yarn mill. Have had six years' experience hosiery yarns. Can furnish good references. Age 30. Married. Address No. 129.

WANT position as overseer of carding or spinning or overseer of carding and spinning. Have had long experience and can furnish the best of references. Address No. 130.

WANT position as overseer of weaving in small room, or second hand in large room. Experienced on counts from 18s to 50s. Experienced on plain and Draper looms. Good manager of help, sober and reliable. Good references. Address No. 131.

WANT position as overseer weaving in large mill on white work. 22 years' experience on Stafford Automatic Looms, also expert on Draper Looms. Can get quality and quantity. Will consider nothing less than \$5 per day. Address No. 132.

WANT position as superintendent of mill making cloth, or would take overseer of spinning in large mill. Long experience, good references. Now employed as superintendent but wish to change. Address No. 133.

WANT position as carder or spinner. Can take position in short notice and can furnish the best of references. Address No. 134.

WANT position as superintendent of small yarn mill, or overseer of carding in large mill. Familiar with white and colored goods. 23 years experience in mill business. Now employed as superintendent. Would not consider less than \$3.50 per day. Address No. 135.

WANT position as superintendent of yarn mill. Experienced on white and colored yarns from 8's to 40's. Have 23 years experience and can give good references. Address No. 135.

(Continued on Page 18)

Cotton Manufacturing in Portugal.

(Continued from Page 3)

other reasons for this predominance. Ships sailing from England to South America make Oporto (Leixoes) and Lisbon ports of call, and as these boats make fast and frequent trips a very direct and efficient line of communication is enjoyed by the two countries. It is sometimes possible to order goods from England and secure delivery in the same week. Moreover, there is a large colony of English people in both Lisbon and Oporto, and there is a natural inclination on the part of the local merchants to import English goods. Manchester manufacturers are represented on the spot by resident agents. Twice each year, in the spring and in the fall, salesmen are sent out and they remain in the country for two months, showing new lines of samples and coming in touch with the trade.

Portuguese merchants demand long credits and six months net are the usual terms, although the time of payment is extended even further than this in many instances. There are very few losses as a result of long credits and since it is the custom in the country competitors must be prepared to offer the same terms. Recently Germany has been securing an increasing amount of the cotton-goods trade in certain lines, particularly the finer grades of colored goods and linen fabrics. There are many Germans in the country and as there is a direct and quick steamship service between Bremen and Oporto, and the German manufacturers offer the same terms as the English, the competition in certain lines is growing very keen. In gray goods, however, England enjoys an almost complete monopoly, the imports from the country being chiefly print cloths. There is no fixed method of packing, but pieces of 126 yards are preferred in order to avoid so many seams in the bleaching and printing processes.

Competition of Domestic Mills—American Trade.

As in many other cotton-manufacturing countries of the world, Portugal supplies practically all the coarse goods for domestic consumption and the native mills are slowly securing a share of the business in finer grades. So firm is the hold that England has on this trade, however, that not infrequently the merchants use the mark "Ingles" on the products of the domestic mills.

It is rather difficult to ascertain the actual retail price of a piece of cotton goods in the stores in Portugal. One merchant will sell a cloth at 400 reis (40 cents) a meter while another will offer the identical goods at 70 reis (7 cents), and sometimes the difference is even greater. Not infrequently the customer makes a lower offer than the price asked, and it is accepted. There is a lack of uniformity in the methods of classification at the various custom houses, which results in different duties being levied on the same class of goods. This also leads to variations in prices on the same grade of goods.

American cotton goods are unknown in this market. One importer told me that he had used some American goods 10 to 15 years ago and that they were of a better quality than similar goods of English make. On being questioned as to why he had ceased to use them, he stated that the prices were too high, and that his customers preferred the English goods at a lower figure. Another importer, on being asked why he did not use American goods, made the same complaint as to high prices, but stated that he had not seen quotations on American products in 10 years.

There seems to be a general impression that American goods are too high in price, and I believe that this could be dissipated, as there are undoubtedly certain lines of ginghams and print cloths that American firms could sell in Portugal in competition with other foreign manufacturers. There is certainly no prejudice against American goods; on the contrary, the importers and dealers seem to be extremely anxious to increase trade with the United States.

(Continued next week)

Loom Shuttle-Check.

(Continued from Page 7)

When there is no shuttle in the box the parts of the shuttle check mechanism will normally be in the position shown in Fig. 1. When the shuttle enters the shuttle box, in the direction of the arrow, Fig. 1, the forward or outer end of the shuttle will come in contact with the engaging end 9" of the lever 9, and move said lever outwardly, and through the action of the expansion spring 12, move the engaging end 13b on the portion 13a of the lever 13 yieldingly inwardly, to press against the binder 6, and force the binder against the side of the shuttle to bind the same.

WANT position as overseer of weaving. Experienced on both colored and white work. Age 34. Married. Good references. Address No. 136.

WANT position as overseer of carding at not less than \$3.00. Now employed but wish healthier location. Have had long experience and can furnish best of references. Address No. 137.

WANT position as superintendent or overseer of carding and spinning at not less than \$4.00. Now employed in large mill but wish to change. Good references. Address No. 138.

WANT position as carder and spinner or spinner in large mill. Age 34. Married. Good experience and references. Address No. 139.

WANT position as superintendent. Long experience and now employed but wish larger mill. Can furnish best of references. Address No. 140.

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CHARLOTTE, N. C.Correspon-
dence Solicited**Your Line Shafting
Is Wasting Power
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Probably the greatest waste of power can be charged to line shaft friction. Are you ready to listen when we say we will positively guarantee to save you from 15 per cent to 25 per cent of your friction load?

Do you realize what this means in dollars and cents? You cannot afford to let the line shaft eat up your costly power.

Take action today by writing to find out all about the Kinkead Method of aligning and leveling shafting.

Can be used night or day. Used also for leveling up spinning frames, roving frames, etc. Only quick and absolutely accurate method. No great mechanical skill required to operate.

**MAY WE GIVE YOU A FREE
DEMONSTRATION?**

Send for Catalog "D"

KINKEAD MANUFACTURING CO.

7 Water Street, Boston, Mass.

WANT position as superintendent or carder and spinner. Now employed and can furnish good references. Address No. 141.

Finish Him.

Kind Old Lady—Little boy, wouldn't you like to go to Sabbath school and learn to be good?

Little Boy—No; it would ruin my repertashun.

Kind Old Lady—Ruin your reputation?

Little Boy—Yes'm; I'm known as "the bad boy of the block."—Ex.

WANTED position as overseer spinning by practical as well as a technical man. Married. Am strictly temperate. Can come on short notice. Will consider nothing less than \$2.50 per day. Address No. 142.

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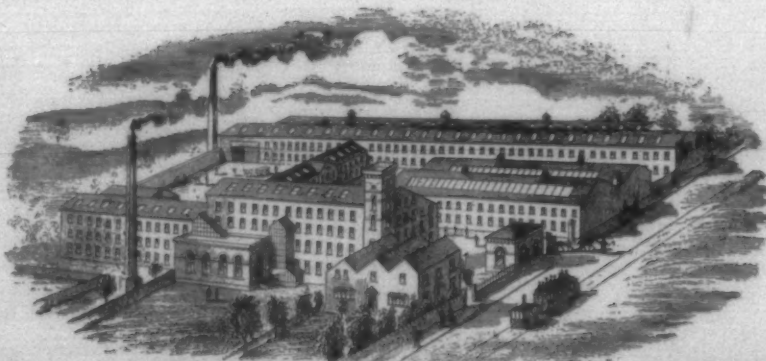
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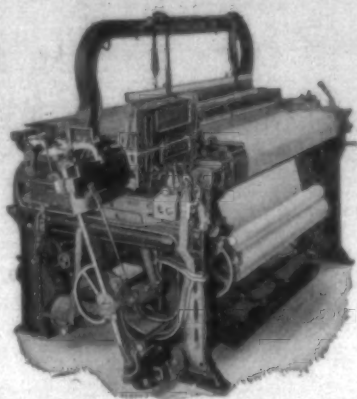
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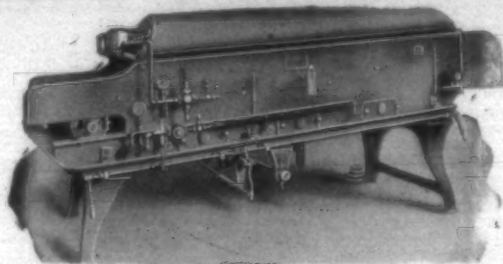
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